HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 17, NO. 11, ABSTRACTS 1524-1681. NOVEMBER 1977

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HOSPITAL ABSTRACTS

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HOSPITALS IN GREAT BRITAIN

1524. HALL, S. and PERRY, D. L. **Crumpsall hospital 1876-1976: the story of a hundred years.** Manchester, [Crumpsall Hospital, 1977], 46pp.

A history is given of Crumpsall Hospital, Manchester, from 1876 to 1976. Crumpsall Hospital was originally built as an Infirmary for the new Manchester Workhouse in 1876, situated outside the city of Manchester. The three hospitals, Crumpsall, Springfield (the Workhouse) and Delaunays (the annexe for chronic sick patients) were all built on the same site, and administered together when the Manchester and Prestwich Unions were amalgamated. In 1948 Springfield was separated from the other two but the three came together again in 1972 and now form the North Manchester General Hospital. The three buildings are described, and the organization of Crumpsall Hospital over the last 100 years outlined.

HOSPITALS IN OTHER COUNTRIES

See also Abstract No. 1668

1525. BAUHOFER, F. Krankenhaussysteme in Europa. **[Hospital systems in Europe.]** *Krankenhaus Umschau*, Kulmbach, 1977, May, vol. 46, no. 5, pp. 328-330, 335-337.

Hospital services in Europe are briefly outlined in five groups: southern group (Italy, Spain, Portugal); western group (Netherlands, Belgium, Luxembourg and France); central group (Austria, Germany and Switzerland); Scandinavia; and Great Britain and Ireland. In addition France, Great Britain, Sweden and the Soviet Union are dealt with in more detail.

1526. LEVY, E. Hospitalisation publique et hospitalisation privée: différenciation technique, économique et sociale. **[Public hospital care and private hospital care: technical, economic and social differences.]** *Revue Hospitalière de France*, Paris, 1977, June/July, vol. 41, no. 302, pp. 537-542.

The conclusions reached by the authors of a research project are reproduced. The authors found that the cost of a stay in a public hospital was higher than in a private hospital because in the former costs were distributed in such a way that the less seriously ill subsidised the more seriously ill, and because more laboratory tests were carried out in the public hospital during the patient's stay. Private hospitals concentrated on surgery of average complexity and the public hospital did both straightforward (emergency) and highly complex operations. The higher socio-economic classes made greater use of the private sector, and the higher one's socio-economic class the greater the freedom of choice. Patients in private clinics were more likely to be

satisfied with the attention they received. The factors which determine this situation are considered to be the social and economic structures of society and the popular image of the public hospital as an anonymous bureaucratic organization.

1527. BINDELS, A. H. M. La relation hôpital-médecin: une expérience hollandaise à Amsterdam. **[The relationship between the hospital and the doctor: a Dutch experience in Amsterdam.]** *Hospitalia*, Bruxelles, 1977, vol. 21, no. 2, pp. 60-63.

The Slotervaart Hospital is the municipal hospital for Amsterdam and it was formed from the union of five institutions. Its distinctive feature resides in the fact that all the doctors who work there are salaried employees of the hospital; this is most unusual within the Dutch hospital context. Moreover, the hospital is run by three joint directors: a doctor, an administrator, and an economist. The author describes the advantages of these arrangements.

1528. Gezondheidszorg in Nederland: financieel-economische analyse van het ziekenhuis (II). **[Health care in the Netherlands: financial and economic analysis in the hospital (II).** *Instelling-Management*, Amsterdam, 1977, June 22, vol. 9, no. 6, pp. 7-9.

The paper discusses the organization and cost structure of hospitals. Hospitals in the Netherlands are essentially non-profit making concerns, serving the community. Privately run hospitals are legally, societies or foundations, each with a board and a management. Responsibility rests in the main with the board, which should publish regular accounts, such as an annual report including financial, economic and medical sections. Running the hospital is the task of the management, the executive body of the board, which in larger hospitals is frequently under the tripartite directorship of a medical officer, an economist and a nursing officer. Its tasks are preparation of material for board decisions, staff management, organizational development and medical management. In matters of cost control, employment contracts and investment in equipment there should be close consultation with the medical staff. On effectiveness and efficiency a recent report on hospital control is quoted, which suggests regular reports on evaluation of medical treatment on a number of patients and research into less costly non-medical treatment methods. From 1970 to 1974 hospital fees rose by 19.5 per cent, and by 18 per cent in 1976. The causes were: (i) depreciation based on replacement values; (ii) high costs of new buildings with expansions for specialisms; (iii) high salaries (average 67.7 per cent of 1975 budget); (iv) high interest rates. The problem will be how to cut costs in a period of rising expectations. The paper includes one graph.

1529. GRENIER-LAVOIE. Un lieu où renaître. **[A place to be born again.]** *Infirmière Canadienne*, Ottawa, 1977, July, vol. 19, no. 7, pp. 19-22.

The author spent two years as a nurse in the psychiatric unit of Fann Hospital in Dakar, Senegal. This open unit has 150 beds, mainly in two-bedded rooms. There are five psychiatrists on the staff, one of whom is Senegalese. Each patient is accompanied throughout his stay by a member of his family. The activities of the unit have no rigid structure; group therapy as well as medical treatment is widely used. Many psychiatric illnesses among the Senegalese are due to the conflict between

Western and traditional values, and the objective for the staff is to introduce Western-type care while at the same time assimilating rather than destroying what is valuable in traditional Senegalese treatment.

1530. FERRARI, A. Recupero del patrimonic ospedaliero esistente: il caso dell' ospedale generale provinciale di Leno-Manerbio. **[The renovation of the existing stock of hospitals: the case of the general provincial hospital of Leno-Manerbio.]** *Tecnica Ospedaliera*, Milano, 1977, May, vol. 7, no. 5, pp. 27-33.

The author discusses the problems of reorganization raised by the Hospital Plan for Lombardy which specifies the type and number of hospitals required in the region, and describes in detail the particular problem which arose in part of Brescia where there were three hospitals and, according to the Plan, only one was needed. He describes the criteria established to determine which of the three hospitals would become the new provincial hospital. One was immediately ruled out on grounds of size. The other two, at Manerbio and Leno, were studied as to the area occupied by each department, the ratio of the total area to the number of beds, the amount of land available for extension, and the cost of extending each and of bringing it up to the required standards. Their proximity to roads and railways and their position in relation to the area to be served were also considered. Manerbio was finally selected, but since it may be many years before the new hospital is completed, there will be a gradual reorganization and all three hospitals will continue to be used for some time to come.

1531. MINISTÈRE DE LA SANTÉ ET DE LA SÉCURITÉ SOCIALE. Recensement des établissements d'hospitalisation privés, activité en 1973. **[Census of private hospitals, 1973.]** *Santé Sécurité Sociale: Statistiques et Commentaires*, Paris, 1977, March/April, no. 2, pp. 1-120.

The main tables of the 1973 census of private hospitals and clinics in France present statistics on (a) the number of beds and the bed/population ratio for medicine, surgery, obstetrics, convalescence, mental health, rehabilitation, and tuberculosis; (b) the distribution of the clinics as a function of size, type of stay (short, average, long); and (c) the main parameters of activity in medicine, surgery, obstetrics, etc. Other tables detail the natural movement of population, the epidemiology of transmissable diseases, causes of death, social security payments, and social security contributions. There are also 42 maps of France which summarise the data for each region. In 1973 the private sector represented 39.4 per cent of the total hospital potential in France as compared with 41.1 per cent in 1972. This slight decline is explained by the fall in the number of beds required for obstetrics and tuberculosis. The private sector contains only 15 per cent of all beds for medical cases, but 49 per cent of all surgical beds.

PLANNING, DESIGN AND CONSTRUCTION

See also Abstract No. 1561

DETERMINING SIZE OF HOSPITAL AND BED NEEDS

1532. ROURKE, A. J. J. **Facilities planning: on your mark, get set, go!** *Trustee*, Chicago, 1977, May, vol. 30, no. 5, pp. 25-26, 29.

Assessment of need, as distinct from demand, is an essential prerequisite of facilities

planning for any health service. The planning stages are made up of the following: (i) the long-range plan; (ii) evaluation of funds; (iii) assembly of a design team; (iv) defining of functions within certain spaces; (v) schematic drawings; (vi) design development; (vii) working drawings; (viii) the tendering process; and (ix) co-ordination during construction. Some of the stages may be overlapped provided there is a high degree of co-ordination and supervision. Construction management has brought to the health field the contractor's knowledge of labour and construction techniques and the ability to detail costing and provide a guaranteed maximum price. The provision of a specified product at a specified price, or the 'turnkey approach', is another method borrowed from industry, but needs to be used with care in hospital planning.

HOSPITAL DESIGN

See Abstract Nos. 1533, 1535, 1537, 1657, 1668

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

See also Abstract No. 1536

1533. Kreisspital Wetzikon—ein imposanter Neubau. **[Wetzikon district hospital —an imposing new building.]** *Hospitalis*, Zürich, 1977, July, vol. 47, no. 7, pp. 361-362, 365-366.

The new building for the 260-bed Wetzikon Hospital, which serves a population of 30,000 in Wetzikon and neighbouring districts, consists of a podium with the ward block rising above it. There is a surgical department (including emergency unit and physiotherapy department); a department for obstetrics and gynaecology (with delivery rooms and nursing unit); a medical department (with laboratory, blood supply unit and intensive care unit); an underground civil defence unit (with shelter for 550 persons, beds for 230 and an operating suite); and an X-ray department. The paper is illustrated with three photographs.

EXTENSIONS AND RECONSTRUCTIONS

See also Abstract No. 1530

1534. Die Krankenhaus-Planung in einer Phase struktureller Veränderungen. **[Administrative problems in hospitals. Hospital planning in a phase of structural alterations.]** *Veska*, Aarau, 1977, May, vol. 41, no. 5, pp. 215-219.

Two aspects of hospital planning in Switzerland are discussed in this paper. The first is the need for inter-cantonal collaboration to ensure that services are used to full capacity and that staff are also fully occupied. Much needs to be done in this area: at present some 18 cantons have a hospital plan but most of these are out-of-date and show lack of co-ordination and uniformity. The second aspect dealt with is the possibility of immediate measures to increase efficiency in specific instances. An example is given of improvements made in the wards of an older 264-bed hospital which enabled staff complements to be reduced, and improved services to be provided, while actual

costs, calculated over the years, were unaffected. The improvements included organizational and structural changes, re-grouping of staff, and better equipment.

1535. DEUTCHES KRANKENHAUS INSTITUT DÜSSELDORF. Konzeptionelle Basis der Modernisierung von Grosskrankenhäusern. **[Conceptual basis of the modernization of large hospitals.]** *Krankenhaus*, Stuttgart, 1977, June, vol. 69, no. 6, supplement, pp. 1-12.

The author discusses and illustrates with a number of examples the problems which arise when an obsolescent large hospital, which cannot be rebuilt on another site, has to be extended and modernized.

1536. WEISS, H. Ausbau des a.ö. Krankenhauses Wiener Neustadt. **[Extension of the general district hospital in Wiener Neustadt.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1977, May, vol. 18, no. 5, pp. 297-300.

Extensions to the Wiener Neustadt Hospital, being carried out in three stages and to be completed by 1988, will increase the bed capacity from 680 to 1180. Stage I, started in 1974, included extensions to the school of nursing and a new nurses' home. Stage II, started in April 1977, includes a ward and treatment block. The 10-storey building has a four-storey podium for administration and treatment departments above which rise the ward floors, each with two 35-bedded wards. Stage III will include a further ward block and a new block for the pathological institute.

DESIGN OF SPECIAL HOSPITALS OR UNITS

See also Abstract Nos. 1631, 1668

1537. REIZENSTEIN, J. E. and MCBRIDE, W. A. **Design for normalization: a social environmental evaluation of a community for mentally retarded adults.** *Journal of Architectural Research*, London, 1977, March, vol. 6, no. 1, pp. 10-23.

Normalization is the concept that the mentally handicapped should be able to live like 'normal' people; it is the antithesis of institutionalization. Both these philosophies have implications for the physical environment. The first part of this paper describes the field of environment behaviour research and explains the role of social-environmental evaluation in this field. Mental handicap is defined, together with a brief history of attitudes towards the mentally handicapped and their residential environments. Some design implications of normalization are explained briefly. New England Villages, Pembroke, Mass., is a small living and working community for 25 mentally handicapped adults which was established and designed around the philosophy of normalization. This study of the community two years after it was opened covers: pre-design programming, design and construction of the house; evaluation of the community by its physical features; and evaluation by three normalization issues—social contact, activity support, and symbolic identification. It is concluded that New England Villages is infinitely more humane than the traditional institution in the physical features it provides; yet there are many examples of normalization concepts which this environment does not support.

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

See Abstract No. 1560

ELECTRICAL INSTALLATIONS AND EQUIPMENT

See Abstract No. 1618

ARTIFICIAL LIGHTING

1538. OGUS, H. J. **Emergency lighting—progress and practice.** *Hospital Engineering*, London, 1977, May, vol. 31, no. 4, pp. 7-13.

The *British Standard 5266: part 1; 1975, Code of practice for the emergency lighting of premises* has been heralded as removing much of the ambiguity and confusion which had previously existed. It has encouraged rationalization of the requirements of much legislation including by-laws covering various types of premises. The prime needs for lighting in hospitals are discussed. The primary requirement for emergency lighting is the provision of the most reliable method of illuminating an escape route, and which must also permit the immediate location and operation of alarms, fire fighting equipment and reduce the risk of panic. Suggestions for designing the most practical scheme are presented with special reference to public areas, wards, operating theatres and ancillary areas. Light sources and equipment are discussed. Terminology used for describing circuits is explained. Regular testing of the system is essential. Additional features include product standards, luminaires, signs, bulkheads, general purpose luminaires and standard fluorescent luminaires.

1539. GUGLIERMETTI, F. and PENNACCHIA, G. L'illuminazione degli ambienti ospedalieri. **[Lighting in the hospital environments.]** *Ospedali d'Italia*, Como, 1977, March, vol. 14, no. 3, pp. 68-84.

The authors describe the general factors (safety, hygiene, efficiency) which affect the choice of lighting in the hospital and also the particular factors (contrast, colour, glare, radiance, wall finishes, reflection). They suggest what the appropriate levels of illumination should be in the patient's room, operating theatre, paediatric ward, X-ray department, EEG and EMG laboratories, dental surgery, and corridors, and what type of light source is required. They emphasise that in the nursery for newborn infants lighting should be of such a type as to allow immediate identification of jaundice and cyanosis. They discuss emergency and safety lighting and the economic and administrative aspects. Four tables summarise: (a) colour temperatures for various types of fluorescent lamps; (b) values, in lux, for corridors and rooms without natural light; (c) energy consumption for hospitals of different sizes, using fluorescent lamps, and (d) values of the specific power required (in watts per square metre) as a function of the type of illumination.

COMMUNICATION SYSTEMS

See also Abstract No. 1576

1540. BONGIANA, R. **I'impianto di posta pneumatica delle cliniche universitarie di Napoli. [The installation of a pneumatic post system in the Naples university hospital.]** *Tecnica Ospedaliera*, Milano, 1977, May, vol. 7, no. 5, pp. 12-13, 15-19.

The pneumatic post system in Naples University Hospital is said to be one of the largest in Europe. It was designed with the aid of a SIAS computerised simulation programme which provided data on the position of the despatch points and the distances between them, the expected load, and the distribution of the reception points. Several systems were simulated before a system consisting of tubes 100 mm. in diameter and automatic routing of containers was selected. Throughout the hospital complex there are 181 despatch points on 23 circuits linked to six sorting centres (one for each three to four buildings on the site). Each sorting centre can deal with 500-600 containers an hour. The containers are made of transparent plastic and are fitted with two groups of contact rings (for 625 possible combinations). There are special containers for liquids. The containers can carry record cards, X-ray films, histological samples, drugs, syringes, and blood samples, etc. Each station has a transmitter with an electromagnetic block and an electromagnetic exchange. The components of the relay apparatus are of the type used in telecommunications technology. This description of the system is accompanied by two diagrams, a map and photograph of the site, and five photographs of equipment.

TRANSPORT IN GENERAL

1541. PETERS, N. E. H. **Transport engineering—legal and operational implications.** *Hospital Engineering*, London, 1977, May, vol. 31, no. 4, pp. 13-20.

The operation of a fleet of transport vehicles in the Health Service context is outlined, including the running of heavy goods vehicles, ambulance vehicles and light commercial vehicles. From studies it is clear that some Regions in the National Health Service have transport expertise, that the strength of management is varied and that maintenance and repair facilities range from very good to none at all. The objectives of maintaining a fleet of vehicles are presented. It is essential to ensure that the operational staff have the right vehicle for the right tasks, and in the Health Service this calls for a great variety of vehicles. The predictable faults in vehicles are discussed. The need for reliability has resulted in monitoring the planned preventive maintenance progress on a weekly basis. The legal aspects of operating a fleet of vehicles are considered. The responsibility of the Engineering Manager in carrying out his objectives is discussed: He will make decisions at two levels (primary—including purchase, staff training and recruitment, and secondary—including maintenance and proper use of repair facilities) knowing that decisions at one level can affect decisions at another. He is responsible for each vehicle from the time it is purchased to its disposal.

VENTILATION AND AIR-CONDITIONING

See Abstract No. 1569

MAINTENANCE OF BUILDINGS AND EQUIPMENT

See Abstract No. 1560

EQUIPMENT, FITTINGS, FURNITURE

EQUIPMENT GENERALLY

See Abstract Nos. 1614, 1632

MEDICAL EQUIPMENT

See also Abstract No. 1653

1542. KEBBEL, W. and GAIKHORST, G. Sicurezza degli apparecchi elettromedicali. **[Safety of medical electrical apparatus.]** *Tecnica Ospedaliera*, Milano, 1977, May, vol. 7, no. 5, pp. 62-64.

The amount of electrical equipment used in medical diagnosis and treatment is growing year by year and in West Germany a Medical Electrical Committee (K750) regulates the safety of this equipment in respect of construction, installation, and use. The authors list the various types of electrical equipment used in hospitals and explain how these can be a danger to the patient and to staff. Equipment is classified into: type H (similar to domestic equipment), type B, which may be applied externally to the patient and in which current dispersion is limited to values between 100 and 500 μA (0-1 kHz); type BF, similar to type B, but with a floating circuit; and type CF, which can be used for cardiac catheterization and in which the current must be no higher than 10-50 μA. The equipment must be accompanied by adequate instructions. There are also precise instructions on the installation of an electrical supply in buildings in which electrical medical equipment is operated. (This article has been translated from the German and is reproduced because the editors of *Tecnica Ospedaliera* feel that Italian standards are too low and that a Committee on the West German model should be established.)

SURGICAL EQUIPMENT

See Abstract No. 1632

STAFF GENERALLY

RECRUITMENT

See also Abstract Nos. 1546, 1547, 1549, 1554

1543. CALCOPIETRO, M. Assenteismo e lavoro straordinario. **[Absenteeism and abnormal work.]** *Ospedali d'Italia*, Como, 1977, March, vol. 14, no. 3, pp. 85-100.

Staff shortages and a high level of absenteeism are among the main causes of the large amount of overtime (62 hours per month per employee on average) worked by hospital staff in the United Hospitals in Rome. The authors suggest that some at least

of this absenteeism is due to overwork and stress and that a vicious circle exists which can only be broken by employing the correct numbers of staff. It would also help if staff were paid a proper wage; they would then be less anxious to work overtime. The authors analyse statistics on overtime and absenteeism which they have collected from the United Hospitals and present these figures in six tables. As a short-term measure they suggest that there should be stricter checks on whether the amount of overtimed claimed for has actually been worked.

STAFF MANAGEMENT

See also Abstract Nos. 1555, 1556, 1561, 1562, 1633, 1635

1544. DUFAULT, P. Les effets positifs possibles d'un programme d'évaluation du rendement du personnel. **[The possible positive effects of a programme evaluating staff output.]** *Administration Hospitalière et Sociale*, Montréal, 1977, May/June, vol. 23, no. 4, pp. 33-40.

The benefits of a staff output assessment programme are not always immediately apparent and staff may well be hostile initially. The validity of the assessment does in fact largely depend on the system of assessment chosen and on the personality of the assessor. A good system will benefit the employer: there will be improvements in monitoring of performance, in the competence of the administrators, and in the management of human resources. It will also benefit the employee: he will have a greater sense of security and of 'belonging', and the knowledge that he is appreciated by his superiors will encourage him to make greater efforts.

STAFF RELATIONS

See also Abstract No. 1548

1545. JURIS, H. and others. **Employee discipline no longer management prerogative only.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 67-68, 70-72, 74.

This paper analyses the provisions, or rules, relating to discipline and discharge, grievance procedures and interest arbitration in a national sample of 817 hospital collective bargaining agreements. Each of these types of provision is examined in greater detail, the discussion including a brief explanation of basic concepts, the presentation of aggregated and disaggregated frequency data for various types of contract clauses from the national sample of agreements, and comparison data from a survey of contracts in all private sector industry.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See Abstract No. 1565

MEDICAL STAFF

See also Abstract Nos. 1527, 1570, 1663

1546. ENGLEMAN, S. **Crude brush in art of manpower scenarios.** *Health and Social Service Journal*, London, 1977, June 17, vol. 87, no. 4545, pp. 926-929.

Fears of a possible surplus of doctors in Great Britain have grown recently. This paper examines the difficulties of medical manpower planning and the validity of estimates of future needs for doctors. In particular it discusses the conclusions of the Royal Commission on Medical Education and the evidence of the British Medical Association and the Hospital Junior Staffs Committee to the Royal Commission on the National Health Service. Using two sets of not entirely unreasonable assumptions, the British Medical Association was able to project either a shortage or a surplus of doctors. What is clearly necessary is an ongoing, continuous review and analysis of medical manpower. The once-a-decade major reviews are simply not sufficient.

1547. MAYNARD, A. and WALKER, A. **Too many doctors.** *Lloyds Bank Review*, London, 1977, July, no. 125, pp. 24-36.

The report of the Royal Commission on Medical Education 1968 (the Todd report) maintained that by the end of the period 1966 to 1975 the likely shortage of doctors would be 10,000 and urged a rapid expansion of training facilities. The authors claim that this was an over-estimate because: (i) the number of immigrant doctors has been higher than forecast; (ii) the number of students qualifying by means of the Corjoint examination was under-estimated: and (iii) the growth in the population was over-estimated. In terms of the Todd report's calculations there will be a surplus of 120 doctors in 1980, but allowing for a decrease in demand owing to a slower population growth and the current constraints on expenditure, the surplus will in fact be about 5,520 doctors. Possible methods of absorbing the surplus include: (i) decreased remuneration; (ii) unemployment; (iii) reducing the intake of medical schools; (iv) improving the level and quality of health care (unlikely in the present economic climate); and (v) migration. Forecasting in this field can be made more accurate by: (i) using a range of forecast population estimates and reviewing them annually; (ii) reforming the training process for doctors; (iii) modelling flows such as migration, female participation and wastage rates; and (iv) accepting that there is not a fixed relationship between the number of doctors and the production of health care.

1548. GORDON, H. L. and ILIFFE, S. R. **Pickets in white: the junior doctors' dispute of 1975—a study of the medical profession in transition.** London, ASTMS, 1977, 75pp. £0.70

In the 1970s the long-standing grievances of a wide spectrum of National Health Service staff, including ambulance men, ancillary staff, nurses and finally hospital doctors began to get public attention through industrial action. This book describes and explains the result of the Junior Hospital Doctors' action in 1975, and aims to show in detail the 'behind-the-scenes' negotiations as well as the inadequacies of most of the professional organizations of NHS staff. It is concluded that the events of 1975 have permanently altered the NHS.

1549. CARNEGIE COUNCIL ON POLICY STUDIES IN HIGHER EDUCATION. **Progress and problems in medical and dental education: federal support versus federal control.** San Francisco & London, Jossey-Bass, 1976, xiii, 178pp. £5.65

This report examines the rapidly changing developments in medical and dental education in the United States since 1970. The Council believes that there is a danger in developing too many new medical schools, that unequal distribution of health resources and over specialization in medicine could lead to excessive Federal control, and that there should cease to be reliance on foreign medical graduates to meet the need for physicians. It recommends that the Federal government should provide stable financial support for university health science centers, and that geographic disparities in the supply of health manpower should be overcome by combinations of policies providing incentives and co-ordinating Federal and State programs. Further recommendations cover Federal and primary-care training, support for research and health education. The report includes statistical tables of medical and dental education, health manpower, lists of university health science and other centers, and projections of physician supply. A list of references is included.

NURSING STAFF

See also Abstract Nos. 1628, 1633, 1669

1550. JOINT BOARD OF CLINICAL NURSING STUDIES. **The research objective in Joint Board courses: an introductory guide.** (Occasional publications No. 1) London, Joint Board of Clinical Nursing Studies, 1977, 37pp.

This is an introductory guide to the research objective in the outline curricula to enable course teachers at post-basic level to gain more knowledge and understanding of the subject. The guide is in two parts. The first presents an overall view of the aim and objectives of the research content in Joint Board Curricula and suggests ways of achieving them; the second part consists of four appendices which briefly describe the research process, introduce terminology, make reference to the literature and how it may be used, list courses available and the people who may be consulted.

1551. LAMBERTI, G. and PANARA, S. Organizzazione dei servizi di assistenza infermieristica. **[Organization of the nursing service.]** *Ospedale*, Torino, 1977, April, vol. 30, no. 4, pp. 79-84.

The authors define the organization of nursing care services as that combination of factors which determines the existence of an 'organizational substratum' which should guarantee a high level of nursing care. They examine the organization of the nurse's work and use three graphs to illustrate their thesis that it is useless to have an efficiently organized service unless the nurse's work is properly organized, in other words, unless the patients are grouped into those requiring intensive, moderate, or minimal care, and staff allocated accordingly. Tasks should be allocated to nursing teams, there should be better training for staff, and more authority should be delegated to what the authors term the health director, who has organizational and administrative experience, rather than to the chief nursing officer or ward sister.

1552. ROYAL COLLEGE OF NURSING. **Ethics related to research in nursing: guidance for nurses involved in research or any study/project concerning human subjects.** London, Royal College of Nursing, 1977, [iv], 8pp. £0.25

The ethics of nursing research must be consistent with the ethics of nursing practice.

Guidelines for nurses undertaking research cover such aspects as: obligation to the subjects of the study; integrity of the researcher; and relations with sponsors, employers and colleagues. The role of nurses in positions of authority where research is to be carried out is discussed. The responsibilities of nurses practising in places where research is being carried out both as practitioners and as data-collectors are outlined. A bibliography is included.

1553. PEERS, G. P. **Operating room staff development.** *NatNews*, Matlock, 1977, May, vol. 14, no. 4, pp. 10-12.

Any staff, regardless of its size, may be more productive if each person is developed to his or her full potential. Staff development is not a new concept, nor is it a difficult one; yet it is frequently overlooked. Specific aspects must be handled as individual situations, but several general considerations should be studied. Those discussed in this paper include: planning staff coverage (a method for calculating annual staff coverage for a five-theatre operating suite is included); classification of operating theatre staff members; recruiting aids; job descriptions; selection of new staff; references for staff leaving; orientation; in-service education; staff evaluation; problem workers; and the supervisor's role. (This paper was reprinted from *AORN Journal*.)

1554. JONES, D. C. and others. **Trends in registered nurse supply: health manpower references.** (DHEW Publication No. (HRA) 76-15) Washington, U.S. Government Printing Office, 1976, x, 109pp. $1.90

The Division of Nursing, Bureau of Health Manpower, contracted with the Research Triangle Institute (RTI) to carry out a study to determine whether a better projection methodology is available to make periodic estimates of nurse supply in the United States. The aims of the study are: (i) to provide projections of nurse supply; and (ii) to develop a practical projection methodology that can be routinely used over a period of time. The method used by RTI is discussed. Aspects studied include: dynamics of registered nurse supply; registered nurse supply data; evaluation of relevant variables; RTI's nurse supply projection model; and registered nurse supply projections. The model is based on the licensed stock of nurses and the flow of nurses into and out of the licensed stock resource pool. The report identifies an approach to the estimating procedure and defines those areas that, because of their influence on any estimates, need further study and refinement.

1555. CONWAY, R. **Points system helps financial control plus job satisfaction.** *Health and Social Service Journal*, London, 1977, July 8, vol. 87, no. 4548, pp. 1014-1015.

The nurse pointage system adopted at Horton Hospital, Epsom, enables the nursing officer as unit manager, and the senior nursing officer, as functional manager, to know their budget in terms of staff, to employ different grades of staff within the budget and to know within one week the actual incurred expenditure and cumulative status. The system operates by breaking down the hospital's total nursing budget for salaries into small areas of responsibility called cost centres. Each cost centre has assigned to it an individual who is known as the cost centre manager. The procedure followed is described and illustrated in a diagram. The final design of the weekly return form was arrived at by trial and error, with many of the amendments being

suggested by the nursing officers. The form, in carbonized triplicate, requires inputs for all variables which may effect the cost of running the nursing department, but is easy to complete. Further uses of the system are suggested.

1556. DOUGLASS, L. M. **Review of leadership in nursing.** 2nd edition. St. Louis, Mosby, 1977, ix, 173pp. £5.00

The role of nurse leadership is defined as the ability to make correct decisions quickly out of a welter of complex and conflicting considerations. The leadership-management role as it applied to the various structures used in health care delivery systems is discussed together with the influence that characteristics and processes have upon leadership behaviour. The processes involved in the management of nursing services, the changes relating to the nursing scene and the major activities are analyzed. Evaluation is considered as a continuous, cyclic process, necessary for the assurance of quality care. The first edition of this book was published under the title 'Review of team nursing, 1973'.

1557. LEUZINGER, A. Analyse du besoin de formation. **[Analysis of the need for training.]** *Veska*, Aarau, 1977, June, vol. 41, no. 6, pp. 296-301.

A computer-based questionnaire was sent to 4,000 matrons, sisters, nurses, and assistant nurses in hospitals in five Swiss cantons; 1,298 completed them. The questionnaire consisted of 56 questions designed to discover how much each nurse thought she knew and whether she thought that further training was unnecessary, desirable, necessary, or very necessary. The areas covered were: medical knowledge, nursing techniques, organization, teaching, personnel management, hospital law, psychology, sociology, and economics. The questions are reproduced and there is a statistical analysis of the replies. The demand for further training was greatest in the fields of emergency treatment, the use of new medical apparatus, new aspects of internal medicine, psychosomatic medicine, and, among staff in positions of responsibility, for training in the principles of the theory of organization, hospital psychology, sociology, and law, and how to conduct an interview.

1558. MONTESINOS, A. L'évolution des soins infirmiers. **[Developments in nursing care.]** *Gestions Hospitalières*, Mantes, 1977, June/July, no. 167, pp. 479-482, 485-490.

The author examines the hypothesis that developments in nursing care have been influenced by a greater general awareness of the need to humanise the public hospital. He shows that, in response to a series of publications by former patients which attacked the hospitals for their lack of concern for the individual, the French Ministry of Health, between 1958 and 1975, issued nine circulars and decrees relating to the very points complained of, e.g. visiting hours, bedtime, the rights of patients, better out-patient clinics, etc. The professionals then took up the theme and finally the effects of the public debate were felt in the hospitals themselves where new theories of nursing care (some of which the author describes) were gradually put into practice. Finally the appointment of the chief nursing officer as a member of the administrative team indicated the importance officially attached to standards of nursing care.

1559. **'Past present and future'.** *Queen's Nursing Journal*, London, 1977, June, vol. 19, no. 15, pp. 420-422, 424-425.

A series of three articles deals with the foundation of the Queen's Nursing Institute in 1889, describes the Bedford Sick Diet Guild in the first issue of the Queen's Nurses Magazine in 1904, and looks at community nursing over the last 25 years. Queen Victoria's Jubilee Institute for Nurses, now the Queen's Nursing Institute, and between 1928 and 1972 the Queen's Institute of District Nursing, was granted a charter in 1889, although its earlier foundations are harder to trace. Queen Victoria took a personal interest in the Institute, not least in the choosing of the uniform. The Bedford Sick Diet Guild was an organization of 60 to 70 ladies in Bedford who helped district nurses by supplying suitable diets to patients. The third contributor looks back over 25 years as a district nurse, training at a Queen's home and working in the day time in her earlier years. She observes that some diseases have decreased and equipment has improved, but the triple role of midwife, district nurse and health visitor provided a wide experience and the time spent waiting for equipment to sterilize before the days of disposables, was valuable for nurse-patient relationships.

OTHER PROFESSIONAL AND TECHNICAL STAFF

1560. SHIRCORE, R. **Waterbed syndrome threatens to drown engineers' identity.** *Health and Social Service Journal*, London, 1977, July 8, vol. 87, no. 4548, pp. 1016-1017.

Engineers in hospitals can be split into two principal groups: (i) service engineers responsible for the provision of power to the hospital in all its forms, as well as the accompanying support services; and (ii) the physical scientists responsible for operating and maintaining the increasingly complex life support and monitoring systems. These groups share two basic problems—operating sensible and effective purchasing and maintenance policies. Particular problems mentioned include: difficulty in achieving standardization of equipment; lack of consultation over equipment purchases; invariable acceptance by management of the lowest tender; deficiencies in maintenance, lack of effective supervision of equipment by user departments; and electrical problems relating to responsibility. Hospital engineers in Great Britain still lack an adequate career structure despite recent improvements and they feel that hospital staff in general regard them as appendages to the system instead of the individuals who create the physical environment that makes treatment possible.

1561. GROUPE D'ÉTUDE DE L'OUEST. Services techniques et service du plan: actions et interactions dans le cadre de la réglementation nouvelle. **[Technical services and the planning department: action and interaction within the framework of the new regulations.]** *Techniques Hospitalières*, le Kremlin-Bicêtre, 1977, June/July, vol. 32, nos. 381/382, pp. 52-62.

The authors show how the planning and technical services departments in the hospital can co-operate within the framework of the new French regulations related to the planning and construction of new buildings. A short explanatory commentary introduces a series of tables which list: (i) the specific functions of each department; (ii) their complementary functions; (iii) the operating chart for the administrative departments in Angers University Hospital; (iv) the officers of Angers University

Hospital planning department and their duties; and (v) two operating charts for technical services departments.

ANCILLARY STAFF

1562. GRAMPIAN HEALTH BOARD. SOUTH DISTRICT ABERDEEN ROYAL INFIRMARY. **Porters' handbook.** Compiled by W. G. Bruce and A. McKechnie. Aberdeen, Grampian Health Board, 1975, 96pp.

The need for all available relevant information on duties within the portering structure to be recorded in a proper manner resulted in the production of the Porters' Handbook for Aberdeen Royal Infirmary. The growing number of staff under the control of the Head Porter, the speedier turnover of staff and the complexity of duties in the hospital has made the work more demanding. The work at the Infirmary is of a high standard and this booklet is intended to maintain and improve this high standard. The booklet contains all the basic routines of all the portering staff, and a summary from the standing instructions manuals in the Porters' room. Items of general interest to the staff are also included.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1532, 1534, 1535, 1589, 1602

1563. SLOANE, R. M. and SLOANE, B. L. **A guide to health facilities: personnel and management.** 2nd edition. St. Louis, Mosby, 1977, xii, 209pp. £5.60

The background to the development of health facilities in the United States is discussed. Aspects covered include health facilities in ancient civilizations to modern times; major technological contributions; and the contemporary health facility. The functions of the health facility department, staff and interrelationships are described. Particular emphasis is placed upon supervision, scientific analysis, work simplification and direction by objectives in management. The development of automation and the future of health services are discussed, with specific attention to the definition and history of data processing and health facility computer application.

1564. GRESKA, L. Zentralisation von Krankenhäusern verschiedener Grösse zur Erhöhung der Wirtschaftlichkeit. [**The centralization of hospitals of various sizes to increase economy.**] *Krankenhaus Umschau*, Kulmbach, 1977, May, vol. 46, no. 5, pp. 360, 362, 364.

The author describes how the hospitals in the Dachau district of Bavaria were integrated with two homes for the elderly to form an administrative whole with greatly increased efficiency. The hospitals were some 15 km apart but communication and transport difficulties were overcome. Different services were located in different hospitals. One advantage of the arrangement was that staff could be switched to meet special emergencies. Better use was made of both staff and equipment.

1565. ROBINETTE, T. K. **Effective middle management in an era of cost controls.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 56-60.

Hospital chief executive officers in the United States must devote an ever-increasing proportion of their time, concern and resources to relationships with organizations outside the hospital. At the same time, cost control normally requires devoting greater attention to detailed, day-to-day internal management. More and more administrators are solving this dilemma through increased delegation of resource management responsibility to the hospital's middle management group. If middle managers are to assume this enhanced role, a different process for attracting, selecting, motivating, evaluating and retaining these key hospital executives should be considered. Suggestions are made to achieve this.

1566. BRETT, T. E. W. **Lassa fever and other ills: managing a hospital in West Africa.** *Hospital and Health Services Review*, London, 1977, July, vol. 73, no. 7, pp. 235-236.

The author administers the Nixon Memorial Methodist Hospital, Segbwena, Sierra Leone, a busy 176-bed hospital linked to three maternity centres, two state clinics and a range of community and public health work. The hospital is staffed by only three to four doctors, 34 nurses and 60 student nurses. There are no social workers and no dietitians. Among the major problems are malaria, tetanus, pneumonia and Lassa fever, for which there are no proper isolation facilities. The administrator is responsible for managing the hospital's small income, purchasing all supplies and reviewing staff conditions of service. He also acts as hospital engineer. Despite the difficulties, the author finds the work satisfying and the staff co-operative.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 1544, 1564, 1588, 1590, 1658

1567. HEISLER, W. Die Auswirkungen der Nutzungsoptimierung auf die Sach- und Personalausstattung, Finanzierung sowie Wirtschaftlichkeit im Krankenhaus. **[The effect of optimum use on the equipping, staffing and financing as well as the economics of hospitals.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1976, Nov, vol. 17, no. 11, pp. 560-564, 566; Dec., vol. 17, no. 12, pp. 593-604; 1977, Jan., vol. 18, no. 1, pp. 60-66.

The increasing importance of hospitals in the area of medical treatment and nursing care means that hospital costs are rising and it becomes more and more important that the high quality facilities provided should be used only by those who really need them. What is required is optimum use rather than maximum use and this paper discusses in detail how such optimum use affects equipment, staffing, finance and efficiency. These four aspects are dealt with under the headings of nursing service, treatment, supplies, and administration. There are 66 references to the relevant literature.

1568. BUSER, K., GAERTNER, H.-O. VON and KAUL, U. Kostenbewusstsein leitender Mitarbeiter im Krankenhaus. **[Cost-consciousness among senior staff in hospitals.]** *Krankenhaus*, Stuttgart, 1977, June, vol. 69, no. 6, pp. 205-211.

In 1976 a pilot study was carried out among senior staff of a large West German

hospital to determine how cost conscious they were. Questionnaires were sent to 58 senior medical staff, 14 senior nursing officers and 20 senior administrators: 55 per cent replied. The results are analysed in a series of statistical tables and may be summarized as follows: knowledge on costs was deficient, with doctors less aware of them than nurses and nurses less aware than administrators; some of those questioned had ideas about alternative measures to reduce costs but most had no views on this aspect; more advice was needed on cost problems; and the three groups of staff were largely in agreement as to measures which affected costs.

1569. LAUX, H. Nutzen von Klimaanlagen in Krankenanstalten und Möglichkeiten der Energieeinsparung. **[The use of air conditioners in hospitals and possibilities for saving energy.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1977, March, vol. 18, no. 3, pp. 195-196, 199-203; April, vol. 18, no. 4, pp. 251-256, 259.

A comparison of the energy costs of two different types of air-conditioning plant, the 'air-water' system and the 'air only' system, shows that the cost of the latter is from 65 to 75 per cent higher. The safest and most effective way of reducing the energy costs of air-conditioning, which can amount to 35 per cent of total energy costs, is by the use of a recuperative heat exchange system whereby heat from used air is transferred to incoming air. This system is described in detail and illustrated. An installation with a 17,000 cu.m/hour capacity is shown to effect a net annual saving in energy costs of DM9750.

1570. PINEAULT, R. Cadre conceptuel et opérationnel pour l'évaluation et le choix de nouvelles méthodes diagnostiques. **[A conceptual and operational framework for the evaluation and choice of the diagnostic methods.]** *Administration Hospitalière et Sociale*, Montréal, 1977, May/June, vol. 23, no. 4, pp. 9-16.

The author suggests that a diagnostic method may be assessed by (i) considering the results of diagnosis as a function of the sensitivity and specificity of the method used; (ii) by assessing the results of treatment, which may be modified because of earlier or more precise diagnosis with the method employed; and (iii) assessing the process, i.e. evaluating whether or not the new method reduces the use of other methods and generally reduces the cost of diagnosis and treatment. He recommends the Randomised Clinical Trial in the context of a prospective study as being the procedure most likely to produce definitive conclusions and examines how the results of this research can be applied to the planning of the allocation of resources and the establishment of priorities. The method should be used with care since benefits cannot be always expressed in comparable terms. The article includes one diagram and four tables, two of which show how to calculate the index of utility and the index of effectiveness of a diagnostic method.

1571. LARIVIÈRE, R. Nouveaux critères de distribution de l'équipment des laboratoires hospitaliers. **[New criteria for the distribution of hospital laboratory resources.]** *Administration Hospitalière et Sociale*, Montréal, 1977, May/June, vol. 23, no. 4, pp. 5-8.

The author suggests that laboratory equipment in Canadian hospitals could be used to better advantage if automation of procedures were increased from the present level of 75 per cent to one of 90 per cent. Further economies could be achieved by

regrouping, i.e. by regionalizing or centralizing, the laboratories; in this way costs could be reduced, out-of-date equipment replaced, ultraspecialized equipment purchased, and expensive duplication eliminated. The author illustrates his argument with two tables, one showing how rapidly laboratory equipment depreciates, and the other giving total, variable, and fixed unit costs, and marginal and average unit costs. He explains the concept of marginal cost and illustrates his explanation with a graph.

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 1581, 1659-1661, 1666

1572. HURST, J. W. **Saving hospital expenditure by reducing in-patient stay.** (Government Economic Service Occasional Paper 14) London, Her Majesty's Stationery Office, 1977, iv, 14pp. £2.50

The aim of the study is to demonstrate that the use of conventional average costs per day of patient stay, as a basis for estimating the likely magnitude of savings in hospital expenditure, will be misleading as they over-estimate true marginal costs, even in a longer run context in which capital costs have to be treated as variable. Aspects considered include: the model; current costs; capital costs; and illustrative savings from reducing stay. The study also demonstrates how much expenditure might be saved if Area Health Authorities with an average length of stay above that of the median Area were to reduce their stay to that of the median Area. The sources of data are discussed in an appendix.

1573. WEBB, M., STEVENS, G. and BRAMSON, C. **An approach to the control of bed occupancy in a general hospital.** *Operational Research Quarterly*, Oxford, 1977, vol. 28, no. 2, ii, pp. 391-392.

The control of bed use affects expenditure on the hospital service and the treatment and welfare of individual patients. An examination of the problems of controlling bed occupancy in the General Medical Specialty at Kings College Hospital, London, suggests that many common assumptions may need to be revised. The errors of forecast of admissions and discharges observed in a series of experiments were such that control actions would need to be effective within two days to obtain current levels of occupancy. The use of admissions of waiting list patients as a control variable is ruled out except in the form of cancellation of admissions already arranged. Errors of forecasting emergency admissions tended to be less than those of forecasting discharges, yet it appears that simple statistical forecasts of discharges were more accurate than doctors' forecasts. The short term nature of the control problem is such that it is difficult to understand how high occupancy is achieved.

APPOINTMENT SYSTEMS, WAITING LISTS

1574. LONG, A. **Medical opinion of a computer assisted waiting list.** *Hospital and Health Services Review*, London, 1977, July, vol. 73, no. 7, pp. 240-242.

An experimental computer assisted waiting list system was put into operation in a general hospital in the North East Thames Region to test the attitude of senior medical

staff to computer systems. The hospital was matched with one where no such facility was to be installed, and staff in both hospitals were interviewed about their attitudes to computers. Those doctors in receipt of the computer service were asked; (i) how important an aid to their work the new system was; (ii) how useful in practice it had proved to be; and (iii) whether the system was an improvement on the manual one. Before the introduction of the system, doctors in both hospitals had revealed a favourable general attitude towards computers, and those in the control hospital maintained this. The doctors in the experimental hospital, however, showed an increased uncertainty in their general attitude to a computer system, although they agreed it had improved the specific service to which it had been applied. This paradox shows that factors other than client attitudes must be taken into consideration when decisions are made concerning computer systems.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 1574, 1638, 1664

1575. SCHÖNENBERGER, J. Einsatz der mittleren Datentechnik im Spital und Pflegezentrum Baar. **[Installation of central data processing system in the Baar hospital and therapy centre.]** *Veska*, Aarau, 1977, June, vol. 41, no. 6, pp. 263-267.

In 1973 an NCR 399 MDT electronic data processing system came into use at the Baar Hospital (105 acute beds and 120 long-stay beds run as a single unit). By 1977 the original system had been extended and it now covers the following areas: admissions; performance; stores; patient data; wages and salaries (including staff statistics); and book keeping (budget, cost accounting, materials accounting). The hardware and software are described and the paper is illustrated with diagrams, charts and specimen print-outs.

1576. GIANNETTI, R. A., JOHNSON, J. H. and WILLIAMS, T. A. **Using satellite transmission for computerized assessments of patients in remote facilities.** *Hospital and Community Psychiatry*, Washington, 1977, June, vol. 28, no. 6, p. 427.

An experiment was put into operation in 1975 to extend the resources of the psychiatric assessment unit at Salt Lake City Veterans Administration Hospital to the Veterans Administration Hospital in Salisbury, North Carolina, by the use of a satellite link. The patient at Salisbury answered questions displayed on a cathode ray tube terminal and his answers were stored by the computer at Salt Lake City. An interpretation of the answers was printed out at Salisbury. Since the satellite equipment was not designed specifically for the project, the communications network was more complex than necessary and the expense involved prevented the experiment continuing. However, it did demonstrate the possibility of on-line assessment of patients via satellite.

1577. PROKOPH, J. H. EDV im medizinischen Bereich. **[EDP in the medical sphere.]** *Veska*, Aarau, 1977, May, vol. 41, no. 5, pp. 188-197.

This is a detailed account of the application of electronic data processing in a 220-bed rehabilitation centre in Bad Krozingen and proposals for its use in a medium-sized hospital. The paper is fully illustrated with diagrams and a number of specimen print-outs.

1578. BOSSAERT, W. Le système informatique PORTIS de l'hôpital universitaire A.Z. de Gand. **[The PORTIS information system at the University hospital A.Z. at Ghent.]** *Hôpital Belge*, Bruxelles, 1977, May/June, vol. 20, no. 127, pp. 19-27.

The equipment for the PORTIS (Patient Oriented Real Time Information System) at Ghent University Hospital consists of a Univac 418 111 realtime computer which has three types of direct access store, four magnetic tape cabinets, a card reader, and two printers, all in the computer centre. This is linked to a total of 57 terminals located in various parts of the hospital: the reception area, wards, operating block, store, kitchen, pharmacy, central administrative unit, personnel department, and director's office. There is also a PDP 11 communications computer which links up other information systems within the hospital and a PDP 12 which links up with the laboratory data processing system and the intensive care unit's system. There is a specialized staff of 30. Five diagrams illustrate the operation of the system and the author explains it further with concrete examples.

1579. PACK, A. I., MCCUSKER, R. and MORAN, F. **A computer system for processing data from routine pulmonary function tests.** *Thorax*, London, 1977, June, vol. 32, no. 3, pp. 333-341.

The computer system at the Centre for Respiratory Function, Glasgow Royal Infirmary, which has been in use for four years, has been designed both to meet the internal needs of the laboratory and to produce reports which meet the requirements of the diverse groups of clinicians who use the service. Processing of data is carried out twice or thrice daily on a PDP 22/45 computer with a total daily run time of one hour. The programs are written in Fortran IV. For each of a wide range of tests there is a specially designed worksheet on which data are entered by the technical staff. At present the data are transferred to paper tape for input in batch mode by the technicians. Reports from the system, which include an interpretative section with data, are examined first by scientific staff to detect technical errors, and then by clinical staff who may (infrequently) delete or amend the computer's interpretation. Data can also be entered on-line, but at present only tests involving respiratory mass spectrometry are on-line. Details are given of the calculation and interpretative programs. Internal work reports are produced weekly from disc files. The need for, value and defects of the system are discussed. Examples of the output are reproduced.

1580. ERIKSSON, O. and others. **A computerized recording system for cytopathologic diagnoses.** *Acta Cytologica*, Baltimore, Md., 1977, March/April, vol. 21, no. 2, pp. 266-270.

This paper describes the computer system developed at University Hospital, Uppsala, Sweden, to facilitate the administration and work within the cytology department. Diagnoses are coded using the system described in the *Systematized nomenclature of pathology* with some modifications. The personal identification number given to all inhabitants in Sweden is used to identify patients. The system uses a PDP 8/F computer with a TD8-E DEC-tape remit, a Tektronix 4010 display, a Teletype and 32k of core memory. The software used is FORTRAN II and OS/8 SABR assembler language. The system design, program logic and file retrieval are outlined. The system has performed quite well in initial operation. Full implementation has been restricted only by lack of disc memory.

ORGANISATION AND METHODS, WORK STUDY

1581. PIERSKALLA, W. P. and URBAN, G. L. **Special issue on health care.** *Operations Research*, Baltimore, Md., 1976, Sept./Oct., vol. 24, no. 5, pp. 797-1025.

This is a series of 12 articles on selected features of health care in the United States using operations research concepts and techniques. Aspects covered include: analytic framework for investigating optional staffing; scheduling nursing staff; optimization model for in-patient transfers; stockastic model of priority bed distribution; training schemes in hospitals for the mentally handicapped; chain model for events following induced abortion; multi-dimensional utility theory for determining treatment for sore throat and rheumatic fever; utility structure of medical decision-making problem; analytical approach to marketing decisions in health-care organizations; and the planning of rural primary health-care facilities. A bibliography of operations research in health-care systems is included.

MEDICAL RECORDS

See also Abstract Nos. 1577, 1578, 1664

1582. BENJAMIN, B. editor. **Medical records.** London, Heinemann Medical, 1977, xi, 235pp. £6.75

The developments, organization and planning of medical records systems during the 20th century in Great Britain are discussed. Aspects considered include: historical developments; maintenance of records; filing systems and indices; administration; medical secretarial service; evaluation of the record; classification and indexing of diseases; procedures and storage; general practitioner records; the information system and its legal considerations; standardization, planning, and reorganization; computers; and possible future developments.

1583. ROWLEY, A. **Numerical filing of health centre records.** *Hospital and Health Services Review*, London, 1977, July, vol. 73, no. 7, pp. 236-240.

Filing patient records in numerical order eliminates the danger of duplication and extraction of the wrong record. Other advantages include the possible use of an appointment card bearing the patient's registration number and the prevention of unauthorised users retrieving records. A master card index in alphabetical order can include data about the patient in addition to providing a key to the registration numbers. Computer-based systems are already well-suited to the numerical arrangement of files, but where a computer is not used, a new health centre number must be devised, from which the name of the health centre and the patient's general practitioner can be identified. Terminal digit filing is more suitable than a straight numerical order and colour coding, using coloured stickers on the spines of the files may be used to show the terminal digits. The middle two digits may be written on the stickers in a contrasting colour. This method speeds the searching for folders and minimizes the risk of misfiling.

HOSPITAL STATISTICS

See Abstract Nos. 1531, 1629

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

See also Abstract Nos. 1541, 1617

1584. STARK, E. W. De juridische verantwoordelijkheid in zieken- en verpleeginstellingen. **[Legal responsibility in hospitals and nursing homes.]** *Instelling-Management*, Amsterdam, 1977, April 25, vol. 9, no. 5, pp. 29-30, 33, 36.

The paper reports a speech by Professor Stark, director of the Schweizerische Unfallversicherungs-Gesellschaft, Winterthur (Swiss Accident Insurance Co., Winterthur), at the 1976 Swiss Hospital Congress in Davos. With medical knowledge constantly increasing there are no set rules and doctors frequently have to act according to their own judgment. They cannot always know all the factors affecting the treatment and its psychological effect on individual human beings. The legal positions of both public and private hospitals vary considerably according to types of employment contracts with their medical staff. The basic question remains one of 'liability' and the financial assessment of damages is based on the difference between the condition expected from conscientious treatment and that resulting from the given treatment, plus costs for corrective treatment. Questions to be answered are: the cause of a mistake; whether treatment was given illegally, i.e. without the patient's consent; and whether proper explanation of treatment and warning of risks were given. With the legal responsibilities of a hospital there is also the complicated question of responsibility for junior medical staff, which varies for different types of hospital. The legal question of guilt depends on the degree of negligence in wrong diagnosis, and in treatment wrongly chosen or executed, including mistakes by junior medical staff. Practical examples are given to illustrate the statements.

OTHER SPECIAL ASPECTS

1585. SCHWARTZ, M. M. **Three years of strategy smooth occupancy of new hospital building.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 63-66.

This paper highlights some useful concepts and techniques used during a three-year programme to commission the new 31-storey Annenberg Building at Mount Sinai Medical Center, New York. Several administrators co-ordinated the commissioning programme through a decentralized task force of representatives from departments that provided basic services essential for the commissioning. The office of Annenberg co-ordination functioned as the hub of the programme; it was divided into two semi-autonomous move teams. Each floor was treated as a separate subproject, with each move team handling several subprojects. A master schedule for each subproject was based on three primary milestones: turnover date, post-turnover set-up period and target occupancy date. The order for the delivery of new equipment is outlined, together with the procedure for moving existing departments.

1586. MILLER, J. **Starting from scratch.** *Nursing Times*, London, 1977, June 16, vol. 73, no. 24, pp. 888-890.

This paper, by the nurse member of the commissioning team, describes the work of commissioning the first, 369-bed phase of the new William Harvey Hospital, Ashford, Kent, which is to be opened in 1978. The commissioning team consists of a consultant,

the sector administrator, a representative of the regional health authority's capital planning division, and a nurse. From the outset the team decided to take positive account of staff and public attitudes. A league of friends has been publicly launched more than a year before the hospital opens. The paper outlines the prime responsibilities of the commissioning team, the timetable it has established, and the operational manuals which it has produced. The assistant area supplies officer took responsibility for the equipment lists from the start; the lists were not finalized until the operational manuals were in at least advanced draft form. The district personnel department is deeply involved in the work of the team, which has met departmental managers in the district to determine staffing needs. A series of 42 meetings with all staff was arranged and further meetings will follow. A staff newspaper is already being published every other month. A detailed programme of public relations activities has been drawn up.

FINANCE AND ACCOUNTING

1587. WALSH, D. E. **FHA offers favourable financing for hospital projects.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 53-55.

As other means of gaining finance for capital projects recede, long-term mortgages are receiving greater emphasis as a source of capital funds. Hospitals are often reluctant to seek the Federal Housing Authority's (FHA) government-insured financing. Its apparent disadvantages may, however, be offset by certain advantages and the protection that it can afford the borrower. The advantages include: low initial costs, ability to keep other options open, early assurance of availability of funds, and high-ratio loans. Other financing methods compared with FHA are tax-exempt bonds, hospital first-mortgage taxable bonds, bank financing and convention mortgage financing. Considering the merits and disadvantages of these alternative methods, more hospitals are likely to use FHA financing either as initial back-up protection or as the entire financing method. The process for obtaining FHA financing is outlined.

FINANCE

See also Abstract No. 1635

1588. Gezondheidszorg in Nederland: financieel-economische analyse van het ziekenhuis (I). **[Health care in the Netherlands: a financial and economic analysis of the hospital service Pt. 1.]** *Instelling-Management*, Amsterdam, 1977, April 25, vol. 9, no. 5, pp. 9-12.

The paper is based on a 1974 structural report on the financial and economic position of the health services. Health care costs in The Netherlands are at present nine per cent of the Gross National Income and rising. The report finds that most of the increases are due to intramural services (hospitals, nursing homes, etc.). Distinction is made between increases through a rise in volume and increases through a rise in prices. Volume increases are caused by a complex of social, medical and technical factors and cost control should be achieved by volume control. Decentralization (to regions) and a shift from intramural curative care to extramural prevention and after-care are suggested. A re-organization is recommended into: (a) a basic echelon embracing all collective orientated preventive services; (b) a first echelon

embracing non-specialized services for the individual in which the general practitioner occupies a central position; (c) a second echelon embracing all specialist services. Hospitals fall into three categories: generalist, specialist and teaching. Within these groups are variations in size, level of functions, and denominations. To restructure services by reducing beds and merging and closing down hospitals will be a slow process and fall hardest on smaller hospitals. The paper includes three tables and one graph.

1589. COLEMAN, J. R. and KAMINSKY, F. C. **What if Financial Planning Model checks HMO viability before start-up?** *Hospital Financial Management*, Chicago, 1977, May, vol. 31, no. 5, pp. 26-28, 30-33, 36-37.

The Financial Planning Model (FPM) is a computerized simulator used in the United States in the financial planning of hospital and health services, particularly of Health Maintenance Organizations (HMOs). There are two model inputs, the HMO data file and the user data file. The former provides socio-economic and demographic data for various areas and use rates for different services, such as in-patient admission rates. The user data file, provided by the planning group, deals with the types of services to be offered and how they will be financed and delivered. The FPM operates on the inputs to produce 15 planning reports on the annual demand for health services, the annual staffing and space needs of the plan and annual revenue and cost schedules for a five year period. The model can be varied to give an overall economic analysis when certain design factors have been altered. The use of the FPM in a typical plan is described in detail, using variables which have the most influence on the security of a health service plan. These include: (i) the monthly cost of individual, family, Medicare and Medicaid benefit plans; (ii) rates of in-patient stay; and (iii) inflation rates of hospital and medical costs.

1590. **Cost containment: part 1.** *Topics in Health Care Financing*, Germantown, 1977, vol. 3, no. 3, pp. 1-86, whole issue.

A series of papers is presented on the effect of cost containment in the United States health care industry. Aspects covered include: pressures for cost containment and evidence of health care inflation; the use of group purchasing as a cost containment tool; management engineering as a method to improve productivity; and the establishment of productivity incentives for staff.

1591. **Prospective rate setting.** *Topics in Health Care Financing*, Germantown, 1976, vol. 3, no. 2, pp. 1-159, whole issue.

A series of papers is presented on all aspects of prospective rate setting within the United States health care industry. Aspects considered include: concept and practice; prospective rate setting in Rhode Island; prospective rate setting in Washington State; results of prospective reimbursement; administrative responses to prospective reimbursement; management implications of prospective rate setting; and information needs for hospital rate setting.

1592. CAIRL, R. E. and IMERSHEIN, A. W. **National health insurance policy in the United States: a case of non-decision-making.** *International Journal of Health Services*, Farmingdale, 1977, vol. 7, no. 2, pp. 167-178.

Despite the vast range of commentaries and research on the current health care

crisis in the United States, little research attention has been focused specifically on the lack of federal response to this crisis. As a way of focusing analysis on congressional inaction, it is suggested that both the range of health care proposals and the current debates in Congress may be seen as part of an ongoing bargaining process over legitimate alternatives for changes in health care delivery. It is argued that the lack of any new health care legislation may be seen as the result of a series of non-decisions by conservative congressional representatives of the dominant medical interest groups. These non-decisions have successfully excluded any challenges to those interests by reliance upon a predominant mobilization of bias to effectively define and/or divert these challenges as illegitimate attempts at change. The changes which eventually evolve from congressional compromise may represent a modification of the prevailing bias concerning legitimate alternatives, but are unlikely to modify the relation of the controlling interests involved.

HOSPITAL ACCOUNTING

1593. INGRAM, J. C. **Uniform accounting: how it will affect hospitals.** *Hospital Financial Management*, Chicago, 1977, June, vol. 31, no. 6, pp. 10-12.

Steps being taken to introduce mandatory uniform accounting and reporting systems in the United States are outlined. Legislators, regulators and other guardians of the public purse believe that widespread waste and inefficiency exist in the hospital industry. The imposition of uniform accounting and reporting systems is an attempt to define the breadth and depth of the alleged inefficiency. It also contains all the elements necessary to establish rigid fixed controls on an industry that is on the verge of being regulated out of existence.

1594. WATSON, M. **Uniform accounting: using the new Chart of accounts.** *Hospital Financial Management*, Chicago, 1977, June, vol. 31, no. 6, pp. 20-22.

The recommendations in the 1976 revision of the American Hospital Association's *Chart of accounts for hospitals* are compatible with generally accepted accounting principles, except for two recommendations: (i) carrying property, plant and equipment at current replacement cost and basing depreciation on these values; and (ii) carrying long-term security investments at current market value. Although the accounting and reporting concepts and principles are based on functional accounting, they do not depart materially from responsibility reporting. The use of the expanded numerical coding system, which is briefly explained, allows for simultaneous recording for both responsibility and uniform functional reporting systems where uniform reporting is required. Such dual coding eliminates later reclassification.

1595. KOVENER, R. R. **Uniform accounting: the background.** *Hospital Financial Management*, Chicago, 1977, June, vol. 31, no. 6, pp. 24-26.

The definition of uniformity is discussed and a distinction drawn between uniform accounting and what is generally accepted. Health care is not the only industry being pressed to adopt uniform accounting. There is controversy about who should be responsible for developing whatever rules, principles or standards are needed; a number of views on this are presented. The confusion apparent in other sectors is equally apparent in the hospital field. The documents and proposals of the American

Hospital Association, Hospital Financial Management Association and American Institute of Certified Public Accountants are mentioned. The need for further clarification of health care accounting principles has been recognised by the creation of the HFMA's Principles and Practices Board and the AICPA's Health Care Subcommittee.

1596. **Uniform accounting, uniform reporting in hospitals: statement 1 HFMA Principles and Practices Board.** *Hospital Financial Management*, Chicago, 1977, June, vol. 31, no. 6, pp. 14-18.

This is the first of a series of statements prepared by task forces formed by the Principles and Practices Board of the Hospital Financial Management Association. An introduction describes how the statements of the Board are developed. The statement covers background, discussion, definitions and conclusions. The conclusions are: (i) the primary purpose of hospital accounting is to meet the needs of hospital management; (ii) a system of accounting can be, and has been, developed which meets the requirements of hospitals; (iii) mandating a uniform chart of accounts for all hospitals will make it necessary for individual hospitals to maintain duplicate accounting systems; (iv) uniform reporting by hospitals can be achieved with adequate definition of reporting requirements but does not require a mandated uniform chart of accounts; (v) existence of significant differences among hospitals severely limits the validity of comparisons of reported results; and (vi) substantial additional costs would be incurred to install uniform accounting in hospitals with no demonstrated evidence of the cost effectiveness of such effort.

SUPPLIES AND STORES

PURCHASING

See also Abstract No. 1590

1597. POLLARD, T. **The growth and development of a group purchasing program.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 89-90, 92-93.

The Sisters of St. Joseph of Peace formed a small purchasing co-operative seven years ago to serve their own four hospitals. It was an instant success. Within a short time several neighbouring hospitals joined the co-operative and it consisted of 17 hospitals with a total of 1,970 beds. In the second year of operation, a pharmacy subgroup was formed. The group now serves 22 hospitals with 2,093 beds. It functions entirely as a co-operative, with each member hospital having one vote. Five major officers guide the operations: director, assistant director, co-ordinator, monitor and rotating chairman. Membership fees are minimal, the main cost of membership being travel to and from meetings. The procedure for new members is outlined. The day-to-day practice of the co-operative, which puts much responsibility upon the shoulders of individual members, is described. Some obstacles to growth and other difficulties are mentioned. The scheme has achieved considerable cost savings, the annual total averaging between 10 and 14 per cent. Additional benefits accrue from the regular meetings which enable members to discuss problems and exchange information.

1598. HOUSLEY, C. **Product standardization—a team effort.** *Dimensions in Health Service*, Toronto, 1977, June, vol. 54, no. 6, pp. 8-10, 11.

An effective standardization programme can be beneficial and financially rewarding. The best way to achieve product standardization and evaluation is through a well-organized and results-motivated committee. The key element is enthusiastic backing from administration which should draw up an administrative policy and procedure at the earliest possible moment. Guidelines are given for such a statement covering: subject, objective, policy statement, procedural documentation, exceptions, and review and comment. It is essential to involve medical and nursing staff, as well as representatives from the laboratory, radiology, maintenance and housekeeping departments. It is strongly recommended that sales representatives should not attend standardization committee meetings. The committee should consist of not less than 15 and not more than 25 members depending on the size and complexity of the hospital. A sub-committee should be appointed for the retrospective review of items accepted and purchased.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

1599. Ziekenhuis De Stadsmaten Enschede: multi moment opname in de voedingsdienst. **[The De Stadsmaten Hospital, Enschede: a time and motion study of its catering services.]** *Instelling-Management*, Amsterdam, 1977, June 22, vol. 9, no. 6, pp. 23-25.

The object was to take stock of the activities in the central kitchen and the light meal kitchen in order to contribute to the solution of problems within the catering service. Activities were divided into: preparing food ingredients; preparing meals; distribution; transport; general; cleaning; not working. For each section six observations per person were made at ten minute intervals during one hour. A small margin of inaccuracy, caused by changing activity, was allowed for. In total there were 1788 observations, 1000 of which concerned the light meal kitchen. The study was carried out between 7.30 a.m. and 3.30 p.m., with the maximum number of staff on duty. Staff were divided into six groups: (i) chefs; (ii) dieticians; (iii) general service; (iv) catering students; (v) a combination of the first four groups; and (vi) light meal kitchen. Activities were sub-divided in details, and percentage time spent by each group on each activity was determined. Detailed figures are given. Some concluding suggestions were for group 1 to spend less time on cleaning, for group 3 to leave food distribution on wards to internal transport and instead spend time on kitchen cleaning, for group 4 to have better task differentiation. The paper includes eight tables and a graph.

1600. Menuplanning I: vrije menukeuze heeft weinig zin als daags tevoren een keus moet zijn bepaald: vaste en variabele verstrekkingen moeten worden onderscheiden. **[Menu planning I: there is little sense in offering a free choice of dishes**

when the choice of food available for purchase the previous day is limited. A distinction must be made between regularly available food and other kinds (e.g. bread and different kinds of meat).] *Voeding-en Huishoudgids*, Amsterdam, 1977, May 31, vol. 44, no. 533, pp. 303, 305, 307, 309.

To speed up the time between the order for a meal and its consumption the paper discusses ways of improving menu planning. The first essential decision is which foods to buy and what meals will be required. This forms the basis for planning the buying, storing and meal preparation. Plans should be worked out for set periods of e.g. three to four weeks or even a year. A frequently applied system is the 'menu cycle' whereby carefully chosen menus rotate within a set pattern. Responsibility for planning should rest with the head of the catering service, sometimes assisted by catering committees which include members of consumer groups. Factors to be taken into account when working out menus are consumer requirements, nutritional values, combinations of courses, presentation, taste, price, seasons, average length of patient's stay, available number of staff and equipment. The menu pattern is formed of menu units (breakfasts, hot meals, snacks) with a choice of assortments within each unit. Distinction should be made between regularly available choices such as types of bread, and variable choices such as seasonal vegetables and meats. Menu cards for patients can be worked out on a weekly or daily basis. The paper includes a diagram of a meal distribution cycle, a list of examples of food arrangements and four examples of menu cards.

1601. Menuplanning II: inkoopschattingen moeten met zo min mogelijk risico's worden gedaan: met meukeuze-kaarten kunnen produktietotaallijsten worden gemaakt. **[Menu planning II: purchasing estimates must be made as accurately as possible: a complete list of products can be drawn up by using menu choice cards.]** *Voeding-en Huishoudgids*, Amsterdam, 1977, June 27, vol. 44, no. 534, pp. 343, 345, 347.

The paper discusses planning in relation to the organization of the catering service. Patient's menu choice cards can carry a code in letters, figures, colours, or a combination. From these, lists can be drawn up for the amount of food to be purchased and for the preparation of orders in the kitchen. The distribution cycle from a patient's order for a meal via purchase and preparation to consumption, is time-consuming and should be better split into smaller cycles such as preparation and distribution (figs. 1a and b) and buying and storage (fig. 1c). Factors which affect accurate purchasing are the number of patients, what they choose and how much. This can lead to a surplus or shortage of purchased foods and careful menu planning is required based on statistical experience of menu cycles. Risk of waste is higher with variable choices such as fresh vegetables than with regularly available choices such as types of bread. Another suggestion is cycles for distribution (fig. 1a) and for preparation, storage and purchase (figs. 1b and c). As food surpluses may here consist of kitchen-prepared dishes, the use of convenience and deep-frozen foods would be economically justified. The paper includes examples of a menu card and a food purchase list, and a diagram of the meal distribution cycle.

DIETETICS IN THE HOSPITAL

1602. NOR-projekt in volle gang: Normalisatie en organisatie van diëten van groot belang voor patiënt en instelling. **[The organization and standardization of Institutional Catering and Dietetics (NOR) project is well under way: diet standardization and organization is of great importance to both patient and institution.]** *Instelling-Management*, Amsterdam, 1977, April 25, vol. 9, no. 5, pp. 19-23.

State sponsored research was carried out into how far hospital meals could be supplied by outside firms. The object was to reduce hospital catering by the maximum use of ready products and cutting down on staff, while remaining patient-consumer orientated. A first study concerned evaluation of nutritional values, consumer appreciation and cost comparison of hospital-prepared meals with convenience foods, and a second study dealt with industrially prepared diets. The final report, 'Standardization of Diets', recommended: convenience foods only to be used alongside self-catering; development of basic models for catering services in individual institutions; standardization of descriptions of diets and components; research into costs and quality. To work out basic models the NOR project was started under a team of three experts assisted by a team of co-ordinators and an advisory committee; 22 institutions participated. An information service was made available for non-participating institutions. The route from the order for a meal via administration, purchase and preparation to its consumption was analysed. The aim was for flexible catering services offering maximum choice to each type of consumer. It was found that a pre-condition within each institution was agreement on choice of menus, size of servings, preparation methods, nutritional values, and available stocks. Recommended on a national level were standardization of descriptions, sizes and composition of ready-prepared foods and diets. Further research is planned into classification, coding and calculation. The paper includes a diagram and four pictures.

1603. BLINK, T. J. Normalisatie van diëten in Academische Ziekenhuizen: stroomschema als uitgangspunt voor gehele normalisatieproces. **[Standardization of diets in teaching hospitals: a flow chart provides a starting point for the entire standardization process.]** *Voeding-en Huishoudgids*, Amsterdam, 1977, June 27, vol. 44, no. 534, pp. 349, 351.

Following an official report on the standardization of diets in hospitals, published in 1975, the teaching hospitals combined to study its practical implementation taking into account their particular problems of patient care, teaching and research. Three groups were set up: (I) a working group composed of dietitians concerned with medico-dietetic aspects; (II) a working group composed of catering officers concerned with organizational and technical aspects; (III) a co-ordinating group representing all co-operating disciplines and with the task of co-ordinating and channelling all relevant activities. This group worked out a flow-chart defining: for group I a programme including initial discussions, definition of types of diets, quantitative requirements and grading of nutrients, total number of meals and proportionate numbers of special diets, consultations with medical staff; for group III a programme including initial discussions, stock-taking of available foods, universal (national) standardization of portions, analysis of nutrients including their source, administration, nutritive values and grading of food portions. There should be close consultations between the groups. The detailed procedure for each group is outlined in a diagram.

KITCHENS

1604. EIGENER, U. Die Küche im Hygienesystem des Krankenhauses. **[The kitchen in the system of hygiene of the hospital.]** *Krankenhaus*, Stuttgart, 1977, June, vol. 69, no. 6, pp. 219-223.

The importance of adequate hygienic measures in hospital kitchens—both central and ward kitchens—is stressed. Tests have shown that micro-organisms are present to roughly the same extent in central and ward kitchens on floors, working surfaces, trays, hands and clothing of staff, dishcloths, sinks, etc. Disinfection is of extreme importance and a proprietary substance called 'Quartacid' (a quaternary ammonium compound including glyoxyl and phosphoric acids) is particularly recommended. Hand disinfection and regular changes of clothing are necessary.

FOOD SERVICE

1605. **Push-button food and drink: vending saves hospitals £30,000 a year.** *HCIMA Journal*, London, 1977, July, no. 67, pp. 12-13.

The installation of Wittenborg vending machines was carried out for a trial period of three months at Netherne Hospital, Coulsdon, and then extended to other hospitals in the Redhill and Netherne group. The innovation resulted in a saving of £18,000 in the first year of operation rising to £30,000 in subsequent years, the main saving being in the provision of meals for night staff. Types of food offered include main hot meals, main cold meals, hamburgers, fruit, biscuits and beverages and, in some cases, raw food which can be cooked in a ward kitchen. The machine is cleaned and re-loaded in the morning and early evening and unused meals are destroyed. The machines do not cause unemployment, as efficient hospital catering staff are in short supply.

1606. Verpleeghuis Randerode te Apeldoorn: goed leefbaar klimaat mede gerealiseerd door organisatie van voedingsdienst: dankzij automaat altijd broodjes en snacks verkrijgbaar. **[The Randerode Nursing Home, Apeldoorn: a good community atmosphere is brought about through the organization of catering services: thanks to the use of automatic machines, rolls and snacks are always obtainable.]** *Voeding-en Huishoudgids*, Amsterdam, 1977, June 27, vol. 44, no. 534, pp. 334-336, 341.

The catering and domestic services of the 360-bed nursing home are organized under a head and two co-ordinators. The 16 staff work a seven-day week on a shift basis from 6 a.m. to 6 p.m. Food is prepared in the conventional way and kept hot on 'au bain Marie' trolleys. Patient's diets (216) are portioned according to coded menu cards and placed on battery-heated plates on a conveyor belt for transport. Meals for staff and visitors (80 to 100) are wheeled on the trolleys to the self-service restaurant. Cold meals are prepared twice a day. A flexible menu is worked out every fortnight. The restaurant seats 120. Warm meals are obtainable at a set price between noon and 1.30 p.m. Rolls, snacks and beverages can be obtained from a series of slot-machines. The lower sections of the machines are reserved for hot meals for the night staff who can reheat these in a microwave oven. Coffee distribution is de-centralized with a coffee-making machine in each of the 12 departments, plus the administrative section,

the committee hall and the restaurant. Dirty crockery is collected in containers on trolleys with separate pails with soapy water for cutlery. The paper includes a diagram of the administrative layout of catering and domestic services, an example of a weekly menu and eight pictures.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

1607. **Decentralized laundry service: an often overlooked alternative.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 113-114, 116.

There have been numerous papers weighing the advantages and disadvantages of the in-house laundry against those of central or shared and contract services; the further alternative of a decentralized laundry is often overlooked. Such a service is in operation at Midland (Miss.) Hospital Center, perhaps the only one of its kind in the United States. Each of the upper three floors in its new building contains a total of 80 beds and is serviced by its own laundry unit. The main laundry unit in the basement provides a service for the 18-bed mental health unit, operating and delivery departments and part of the skilled care and pediatric units. Each of the floor laundries contains one 75-pound washer and one 100-pound dryer; the basement laundry unit has one 65-pound and two 25-pound washers and three 65-pound dryers. In a three-month period in 1975 the cost per pound of laundry was approximately nine cents compared with the state average of 15 cents. Other advantages include increased flexibility, ease of transport, improved control and prompt service. It is not claimed that a decentralized laundry service would be beneficial for all hospitals, but administrators should give careful consideration to this approach.

1608. MARTOS, G., SCHIEFNER, G. and SZÜCS, D. A miskolci megyei kórház textilkezelésének problémái. **[Laundry problems at the Miskolc County Hospital.]** *Egészségügyi Gazdasági Szemle*, Budapest, 1977, June, vol. 15, no. 2, pp. 207-219.

The authors studied the development between 1970-75 of the largest centralized laundry in Hungary dealing with the laundry of several hospitals and health facilities. The increased productivity, the optimum use of machine capacity, and the turnover speed of 95 per cent of the textiles in the store indicate the rational management and economical production methods used. The quality is controlled by the use of the new technology of thermodisinfection. However, with the increase of the daily production from 7,000 Kg to 9,000 Kg there has been greater mechanization. The output from the hospitals is 2 Kg per bed day and the daily output by one worker in the laundry is 116.9 Kg. Problems of organization and hygiene arise in the wards with the sorting of the laundry. The number of patients attended did not alter during the survey although the number of operations and average length of stay increased, affecting the turnover rate of the laundry departments linen service.

HOSPITAL LINEN AND TEXTILES

See Abstract No. 1630

HYGIENE IN THE HOSPITAL

See also Abstract No. 1604

SOURCES OF INFECTION

1609. **Hemodialysis-associated hepatitis in the United States, 1974.** *Journal of Infectious Diseases*, Chicago, 1977, April, vol. 135, no. 4, pp. 687-691.

During 1975 a card questionnaire was sent to the 476 haemodialysis units that, according to the National Dialysis Registry, were functioning in 1974. Questions, all concerning operations of the unit in 1974, were divided into four categories: dialysis patients, dialysis staff, unit characteristics and unit operation. Questionnaires were returned by 312 units who had dialyzed 15,382 patients for one month or more in 1974 (representing 88.8 per cent of the estimated total number of patients dialyzed in the United States during the year). Of these patients, 953 (6.2 per cent) had contracted serologically confirmed hepatitis B infection. The overall attack rate of hepatitis in staff employed for longer than one month in a dialysis unit was 5.8 per cent. Detailed results are given in five tables and discussed. The data show that haemodialysis-related hepatitis continues to be a growing problem in the United States, in contrast to the United Kingdom where it is decreasing in response to an emphasis on control. Since hepatitis B immune globulin has not been shown to be completely effective in staff and may be only partially effective in patients, control measures already shown to be effective must be enforced in the United States.

PREVENTION AND CONTROL

See also Abstract Nos. 1649, 1665

1610. POLK, H. C. and STONE, H. H., editors. **Hospital-acquired infections in surgery.** Baltimore & London, University Park Press, 1977, ix, 158pp. £11.95

The means of minimizing microbial infection in surgical patients, maximising host defence mechanisms and the use of antimicrobial agents to prevent infection are discussed. A clinical review is presented of priorities and capabilities in the control of hospital-acquired infection in all aspects of surgery. Emphasis is placed upon recognising the at-risk patient and designing the appropriate preventive and therapeutic measures in the particular category or illness. Aspects covered include: problems arising in the general surgical patient; the burns patient; the urology patient; gynaecology patient; and orthopaedic patient.

1611. UMAN, S. J. and others. *Pseudomonas aeruginosa* **bacteremia in a dialysis unit. 1. Recognition of cases, epidemiologic studies and attempts at control.** *American Journal of Medicine*, New York, 1977, May, vol. 62, no. 5, pp. 667-671.

During a six-month period there were four cases of Pseudomonas bacteraemia, three of which were type 7, among patients undergoing dialysis at the Veterans Administration Hospital, Madison, Wisc. One of these patients died with widespread infection, including bacterial endocarditis. The presence of type 7 Pseudomonas in the dialysis fluids suggested an important association between infection and growth of bacteria in the fluids. Attempts to reduce the levels of bacteria in the dialysis fluid

using dialysate free of glucose were unsuccessful in clinical trials, despite in vitro studies demonstrating poor growth. A filter placed in the dialysate circuit was only partially successful. The incorporation of an on-line disposable bacterial filter might be an important modification to existing machines. A comprehensive programme to avoid pyrogenic reactions and bacteraemia during dialysis must include protection at the source of water supply, control of growth of bacteria in the dialysis fluid, ability to readily dismantle and sterilize the apparatus, and prevention of leakage through the dialyser membrane.

1612. WAGNILD, J. P. and others. *Pseudomonas aeruginosa* **bacteremia in a dialysis unit. II. Relationship to reuse of coils.** *American Journal of Medicine*, New York, 1977, May, vol. 62, no. 5, pp. 672-676.

Following four cases of Pseudomonas infection in the haemodialysis unit at the Veterans Administration Hospital, Madison, Wisc., blood for culture was obtained over a six-week period from 17 patients undergoing long-term haemodialysis. In a series of 201 dialyses bacteraemia was detected in 18 and blood drawn during 15 contained *Pseudomonas aeruginosa*. Ten of the patients had a Pseudomonas bacteraemia some time during the study; only one patient was symptomatic. The frequency of positive cultures was related to the re-use of coils. No cultures were positive until after the fifth use, but by the 10th use Pseudomonas bacteraemia was associated with 41 per cent of the dialyses. All coils that were used repeatedly and 32 of 48 used only once, grew *Ps. aeruginosa* when filled with media and incubated. This suggests that the coils became infected during dialysis and that benzalkonium chloride, the sterilizing agent, was unable to eradicate this organism. With repeated use, the number of residual bacteria in the coil became large enough to cause detectable bacteraemia during dialysis. Because of the high risk of infection inherent in coil resterilization, this practice has been discontinued in this unit.

STERILIZATION

1613. GIBSON, G. L. **Central sterile supply and sterilization in hospitals in Great Britain.** *Asian Medical Journal*, Tokyo, 1977, March, vol. 20, no. 3, pp. 160-171.

The development of a centralized sterile supply service in British Hospitals has taken place over the last 20 years. Standards before that time were not always satisfactory and some of the aspects of a total sterile supply service were neglected. The major needs of a total sterile supply service are the supply of: theatre instruments; theatre linen and software; ward and departmental dressings and packs; special item packs; heat sensitive materials and instruments; and ward and departmental apparatus. The constituent parts of each area of need and the historical development of each aspect are outlined. The processes of disinfecting, sterilizing and servicing apparatus are discussed. The service is now being extended to include local authority clinics and health centres.

1614. AVOCAT, S. and others. Technologie des équipements de sterilisation à l'oxyde d'éthylène. **[Technology of ethylene oxide sterilization equipment.]** *Gestions Hospitalières*, Mantes, 1977, May, no. 166, pp. 413-417, 419, 421-422; June/July, no. 167, pp. 491-497, 499-501.

This is part of a practical guide for the use of hospital engineers and technicians

intended to supply them with the maximum amount of information on ethylene oxide sterilization. In this article the following topics are dealt with: quality of the ethylene oxide; concentration; temperature of the vessel; relative humidity; exposure times; danger of inflammability and toxicity; services required (steam, compressed air, heat, inert gas, vacuum pump, electricity supply); ventilation; removal of the ethylene oxide; desorption; and ethylene oxide detectors. There are four tables and a graph.

INSECT AND PEST CONTROL

1615. STONEHAM, M. W. **Pest control in health service premises.** London, Lambeth, Southwark and Lewisham Area Health Authority (Teaching), 1977, ii, 50pp.

A study is presented of the arrangements made for pest control in health service premises. Recommendations are made with particular reference to: identification of the species of pests found; means of control; and method of organization and administration of disinfestation. Wood boring insects and agricultural and horticultural pests are excluded from the survey. Aspects covered include: chemical controls; mechanical controls; description of the main pests; prevention and control; the choice of contractor; and the contract. A summary of recommendations is included. Appendices give further details of bird, insect and mammal pests and include a draft pest control contract.

DISPOSAL OF WASTE

See Abstract No. 1630

1616. Ziekenhuisafval: onderzoek in België naar mogelijkheden tot gecentraliseerde verwerking: hoeveelheid stijgt door gebruik van disposables. **[Hospital waste: a study in Belgium of the possibilities of centralized disposal: the quantity of waste matter increases with the use of disposable products.]** *Technische gids voor Ziekenhuisen en Instelling*, Amsterdam, 1977, June, vol. 46, no. 1123, pp. 343, 347.

The study was carried out by the Batelle research centre in Geneva for the 'Institut National des Radioéléments' in Belgium. Special aspects of hospital waste are its pathogenic character and the increasing quantity of disposable products, such as syringes, bandages, etc. The size and composition of waste from Belgian hospitals during the year 1975 were determined and estimates were made for 1980. In the course of treatment the waste is sterilized by radiation and materials suitable for recycling, such as celluloses, synthetics and metals, are sorted and separated. The process is presented in two diagrams: fig. 1 shows the percentage of waste components; fig. 2 shows the disposal procedure. Economic and financial aspects have also been analysed. An increase in waste disposal problems is predicted for single hospitals, group institutions and large health areas.

SAFETY MEASURES

See also Abstract No. 1542

1617. MOULET, M. Les problèmes généraux posés par la sécurité à l'hôpital. **[General problems concerning security in the hospital.]** *Techniques Hospitalières*, le Kremlin-Bicêtre, 1977, June/July, vol. 32, nos. 381/382, pp. 41-51.

The author enumerates the different aspects of the 'safety problem' in the hospital:

buildings, equipment, toxic or dangerous products, inflammable liquids, electrical installations, errors, machine safety, protection of the work-force against ionising radiation, traffic, parking, intruders, and staff hygiene and safety. In this context he discusses the sometimes conflicting roles of the hygiene and safety committee and the committee for the control of infection. From the administrative point of view it is advisable to make a catalogue of all safety problems and appoint a person with special responsibility for safety. The author lists the factors to be considered by the person responsible for safety, by the administrator, and by the ward sister, and briefly discusses the financial and technical aspects. He suggests the creation of a regional hospital advisory section on safety. A technical note on the pruning of trees in which reference is made to the measures to be taken to ensure the safety of passers-by is appended.

FIRES AND FIRE PREVENTION

1618. HESS, E. Anforderungen an Brandmeldeanlagen. **[Requirements of fire alarm installations.]** *Veska*, Aarau, 1977, May, vol. 41, no. 5, pp. 210-211.

The importance of automatic fire alarms in giving the earliest possible warning, and thus reducing the risk of damage, is stressed. The different types of alarms are briefly described: smoke alarms (both optical and those using an ionization chamber); heat alarms (differential and maximal); and flame alarms. All detectors should have an indication lamp. Alarms should be linked to a central control. The paper is illustrated with charts and photographs of equipment.

THE PATIENT

See Abstract No. 1642

ADMISSION AND RECEPTION

1619. TRIPODI, P. and CRISARI, G. L'astanteria oggi e domani. 2a parte. **[The reception ward today and tomorrow. Part 2]** *Tecnica Ospedaliera*, Milano, 1977, May, vol. 7, no. 5, pp. 34-41.

In this, the second of two articles, the authors put forward their own proposals for the hospital reception ward of the future. It should be located on the ground floor of the hospital near the entrance and in close proximity to the emergency department, the medical reception area, the X-ray, ECG, and specialist departments, the analytical laboratories, and the resuscitation and monitoring units. It should be available for patients admitted at night and for those requiring immediate diagnosis and medical or surgical treatment; in this way only patients genuinely requiring in-patient treatment are admitted to the other wards. The others can be dealt with promptly in the reception ward and then sent home, returning to the out-patient clinic if necessary. A busy city hospital would require a medical staff of 16 to man the reception ward, 39 nurses, 14 assistant nurses, two radiographers, two laboratory technicians, and three social workers. There should be an observation room, a waiting room, and two areas containing beds. The authors conclude their proposals with a bibliography of 42 references.

WELFARE OF THE PATIENT

See also Abstract Nos. 1650, 1670

1620. SAYLOR, D. E. **Understanding patients' feelings of loss.** *Hospital Progress*, St. Louis, 1977, May, vol. 58, no. 5, pp. 88-90, 92, 94.

Rapidly rising hospital costs and an increasing emphasis on consumerism make patients' perceptions of the hospital care process more and more important to the hospital industry. Before steps can be taken to enhance the way patients see hospital care, the factors that influence their perceptions must be clearly identified. This paper examines three large areas of patients' perceptions: (i) their feelings of loss due to admission to hospital; (ii) their ways of seeing hospital staff; and (iii) their grasp of hospital policy. The discrepancy between the values society at large reinforces, and those which the hospital society reinforces, emerges clearly. This is most obvious in regard to independence. Patients develop their perceptions of hospital care as the result of many different factors interacting with individual psychological make-up. Hospital staff can be instrumental in shaping them in a more favourable direction only if they are aware of the processes by which patients' views are generated and sustained.

1621. HUNT, J. M. and others. **Patients with protracted pain: a survey conducted at the London Hospital.** *Journal of Medical Ethics*, London, 1977, June, vol. 3, no. 2, pp. 61-73.

A study was carried out in the general wards of the London Hospital of 13 patients with protracted pain, defined as pain, other than post-operative, requiring treatment for more than 48 hours. The object was to discover how successfully patients obtained relief and to enable the staff to develop methods that would identify institutional and cultural factors which prevent or potentiate relief. Despite the limitations of the survey, the results suggest that: (i) patients' expectations are often too low; (ii) there is room for improvement in the use of analgesics in patients with protracted pain; (iii) doctors do not appreciate fully that the effective analgesic dose varies from patient to patient: (iv) nurses accept the presence of unrelieved pain too readily; (v) nurses do not appreciate their potential as agents of pain relief; and (vi) there is a need to modify current teaching about pain and its relief in both medical and nursing schools.

1622. RAKOCZY, M. En attendant la chirurgie du coeur. **[Whilst waiting for heart surgery.]** *Infirmière Canadienne*, Ottawa, 1977, June, vol. 19, no. 6, pp. 20-23.

On the basis of interviews with 11 patients the author identifies four phases in the reactions of the patient awaiting major heart surgery. These are: awareness of the serious nature of the operation, reflection on his own situation and personality, acceptance of the situation, and the final waiting period. She also lists the patients' major concerns: a sense of powerlessness, fear of being a permanent invalid, fear of death, and fear of the operation. She examines the implications of these findings for nursing care: the nurse should encourage the patient to express his feelings; she herself should express her confidence in the surgeon and tell the patient of similar cases which have been successful, and she should allow the patient's family to be with him as much as possible.

1623. RAPHAEL, W. **Patients and their hospitals: a survey of patients' views of life in general hospitals.** 3rd edition. London, King Edward's Hospital Fund for London, 1977, 46pp. £3.75

The survey method used to devise a questionnaire that general hospitals could use to discover the views of patients about their stay in hospital, was given a pilot trial in 40 hospitals and the first two editions of this book were based on the results. This third edition is based on the results from 68 general hospitals in the United Kingdom, completed over two periods, 1967-70 and 1971-74. The statistical information shows for each topic covered in the questionnaire the median level of dissatisfaction and the interquartile range, enabling a hospital to compare its own results with those of other hospitals. Aspects covered by the questionnaire include: overall contentment; ward and equipment; sanitary accommodation; meals; activities; care; best and worst aspects of life in hospital; and levels of dissatisfaction. The effect of the survey upon staff morale and the possible action to be taken by each hospital is discussed.

1624. TOURNIER, R. Le pouvoir de consentement à l'acte médical sur la personne de l'enfant. **[Consent for medical treatment in paediatric care.]** *Techniques Hospitalières*, le Kremlin-Bicêtre, 1977, June/July, vol. 32, nos. 381/382, pp. 67-72.

This extract from a thesis on medical law and health economics describes French law in relation to parental consent to medical treatment: (i) when the marriage bonds are intact: when one parent is unable to exercise his authority, or when one or both parents are dead or incapacitated; (ii) when the parents are divorced or separated; (iii) when a child is illegitimate but recognised by one or both parents; (iv) when the child is adopted. Parents or legal guardians may not consent to experimentation on the child nor to the removal of the child's organs, except in very exceptional circumstances. If parents withhold their consent to medical treatment in an emergency the doctor should inform the public prosecutor who will lay the matter before the Courts and the child will be made a ward of court. The author discusses professional secrecy and parental rights.

HOSPITAL SOCIAL WORK

1625. BRANDENBERGER, M. Spital und Sozialarbeit als Partner, 1 Teil. **[Hospital and social work as partners, Part 1.]** *Veska*, Aarau, 1977, May, vol. 41, no. 5, pp. 207-210; June, vol. 41, no. 6, pp. 254-256.

The theme of this paper is that hospitals and social work are two integral parts of the general welfare of the disadvantaged (and this term includes those who are ill) and that they should therefore work together. As examples of the special areas where this concept is particularly applicable two are selected and discussed. These are: public relations (both internal and external) and care of the handicapped.

TRANSPORT OF PATIENTS

1626. GREATER MANCHESTER TRANSPORT. **Transport to hospitals in Greater Manchester.** Manchester, GMT, 1974, [56]pp. £0.13

A guide, produced by Greater Manchester Transport with the co-operation of the

Health Authorities, to provide patients, visitors and staff with a guide to over 80 hospitals in South Lancashire and North Cheshire. Lists and maps provide information on addresses and location of hospitals, length of journeys from nearby main towns, visiting times and the buses that serve each hospital. Each hospital is also shown on a map in the second half of the book.

HOSPITAL CARE

See also Abstract Nos. 1558, 1589, 1621, 1633, 1646, 1651, 1652, 1655, 1666, 1671, 1672

1627. MARON, C. L'évaluation de la qualité des soins médicaux et infirmiers dans la Province de Québec. **[Evaluation of the quality of medical and nursing care in the Province of Quebec.]** *Revue Hospitalière de France*, Paris, 1977, June/July, vol. 41, no. 302, pp. 509-512, 515-519, 522-534.

In Quebec the programme for assessment of the quality of medical care is highly developed: quality is assessed both internally, by the use of systematic reviews for which the medical director is responsible, and externally through regular inspections by the Corporation of Quebec Doctors. The author describes the operation of both these systems and in an appendix reproduces sample inspection forms relating to the maintenance of medical records and treatment administered. The assessment of quality of nursing care is, on the other hand, still in the early stages of development. A Nursing Audit plan, based on a care plan for each patient, is being developed by the Quebec Nursing Guild, and the Centre for Scientific Organisation of Enterprises, a non-profit-making independent body, has also developed a demerit mark system. There is considerable demand among nurses for training in nursing care assessment, and in response to this demand the course on assessment techniques in the M.A. in nursing studies at Montreal University is shortly to be revised. A programme on the same topic has also been organised by the National Institute of Public Administration.

1628. CROW, J. **The nursing process. 1. Theoretical background.** *Nursing Times*, London, 1977, June 16, vol. 73, no. 24, pp. 892-896.

The nursing process has been broken down into stages in various ways by different authors. Basically, what they say is that, given a problem the nurse: (i) obtains the relevant information (the nursing history); (ii) interprets the information, making use of her own knowledge and previous experience; (iii) draws up a care plan highlighting the method, objectives and ways of evaluating the patient's response; and (iv) evaluates the plan once it has been implemented. Each of these stages is discussed. Reasons for using the nursing process to allow nurses to change from their existing role to the requisite role are discussed from the patient's, the nurse's and the community viewpoint. Before being able to develop a nursing history, it is necessary to be able to know what nursing encompasses, what information needs to be collected, what is the best method for obtaining the information, and the skills needed to obtain it.

1629. MARTINI, C. J. M. and others. **Health indexes sensitive to medical care variation.** *International Journal of Health Services*, Farmingdale, 1977, vol. 7, no. 2, pp. 293-309.

This paper presents the results of a study which attempted to extend the limited area

of current knowledge concerning the relative importance of medical care in the determination of outcome indexes. Data for 1970 to 1972 from the 15 hospital regions of England and Wales were used to determine the utility of health outcome indexes, derived from existing health statistics, for monitoring the quality and effectiveness of health services. Outcome measures reflect not only the impact of the system of care, but also the sociodemographic characteristics of the population. An attempt was made therefore to identify those outcome measures most sensitive to variations in medical care and least affected by sociodemographic characteristics. In general, most indexes examined appear to be more sensitive to variations in sociodemographic characteristics. However, those measures relating to hospital care appear to be relatively more sensitive to variation in medical care than those which are community based. This suggests that, at least for monitoring the effectiveness of community care, it may be necessary to move away from the more traditional health indexes towards measures that take into consideration the different patterns of care and the social and behavioural aspects of health.

DISCHARGE OF PATIENTS

See Abstract No. 1673

HOME CARE, AFTER-CARE

See Abstract Nos. 1559, 1647, 1651

SPECIAL DEPARTMENTS

WARDS

See Abstract No. 1619

OPERATING SUITES

1630. FLETCHER, V. S. **A history of the operation gown and mask—from frock coat to disposables.** *NATNews*, Matlock, 1977, May, vol. 14, no. 4, pp. 19-22, 24.

This paper describes the history and development of the face mask and the operation gown, and highlights the important factors which have to be considered today when producing and choosing these items in disposable form. In face masks one looks primarily for efficiency as well as comfort. These qualities are also necessary in theatre gowns, but other criteria must be examined. These are moisture repellency; dry efficiency; surface fluff; strength; flammability; and static safety. Data on each of these are presented. The better disposable gown fabrics demonstrate those characteristics desirable for improved patient and wearer protection.

1631. **Modular operating theatre systems, a ready-made answer.** *Middle East Health Supply & Service*, Sutton, 1977, May, vol. 1, no. 5, pp. 26-28.

An alternative to the conventional operating theatre design for general hospitals is the octagonal operating theatre which allows for separate openings in three adjacent

walls. The advantages of the octagonal theatre are outlined. Within a given space standardized components can be installed into a modular scheme to provide a given number of theatres and ancillary rooms. Ten sizes of theatre are now available. The components of the theatre are outlined. The whole system is erected and maintained by the manufacturers; the hospital authorities merely have to provide a shell within which the system can be built and supply only normal theatre cleaning and maintenance. The air conditioning system is of the laminar flow type and the system is designed on 100 per cent fresh air to maintain a theatre temperature of 21°C + ½°C and a relative humidity of not less than 55 per cent + 5 per cent — 0 per cent. The ease of servicing is a major feature of the system and the theatre can be erected in as little as six weeks. The modular operating theatre system has been installed in general and teaching hospitals throughout the world.

ANAESTHESIA

1632. ROUSSEAU, C. L'anesthésie électromédicamenteuse. **[Electro-medicated anaesthesia.]** *Techniques Hospitalières*, le Kremlin-Bicêtre, 1977, June/July, vol. 32, nos. 381/382, pp. 63-64.

A brief account of the technique which is based on the principle that a suitably modulated electrical current of a particular shape, when passed through the cranium, permits anaesthesia to be maintained during major surgery. Premedication is similar to that used in conventional anaesthesia; a narcotic and neuroleptic, with perhaps an analgesic, are recommended for induction. An electrode is placed between the eyebrows at the level of the metopic suture and two other electrodes connected to the same pole of the generator are placed in each of the two retromastoidean hollows, as close as possible to the nape of the neck. The current is gradually increased from 0 to approximately 150 mA with the aid of a potentiometer, and the anaesthesia is then usually maintained by preselected electrical values.

1633. AW, A. C. **The recovery room.** *NATNews*, Matlock, 1977, May, vol. 14, no. 4, pp. 15-17, 24.

The first part of this paper discusses the objectives, planning and organization, siting, design and equipment of recovery rooms. The recovery room should be between the sterile and unsterile sections of the operating suites with entry from either side. There should be a minimum of two bed spaces per theatre and sufficient room for storage, preparation and administration. No partitions are built but curtains should be fitted in a selected corner or a cubicle for segregation of infective patients or those not expected to recover. The necessary equipment is listed. The progress of the patient through the recovery room consists of three phases: reception and positioning; observation; and return to the ward. The second part of the paper discusses the care of the patient in each of these phases.

PHARMACY

See Abstract No. 1656

LABORATORIES

See also Abstract Nos. 1571, 1579

1634. WEISSENBÖCK, H. Gemeinschaftslabors auch für Krankenhäuser? **[Community laboratories for hospitals too.]** *Krankenhaus*, Stuttgart, 1977, June, vol. 69, no. 6, pp. 211-216.

While in Western Germany it is fairly common for central laboratories to be set up serving a number of medical practices (there are about 250 such laboratories each serving 15 to 35 doctors), joint laboratories for hospitals are rare. There are not more than two instances of acute hospitals under different ownership being served by a central laboratory. While the advantages of such joint laboratories are obvious (savings in staff, better use of expensive equipment, etc.) there are also disadvantages. These include: longer transport distances and lines of communication; the confirmed need for laboratories in individual hospitals for emergencies; and possible (unnecessary?) increased use of the laboratory because of its convenience and cheapness. One major problem of joint laboratories in Western Germany arises because of the unfavourable tax requirements and the government is urged, in the interests of economy, to remove these anomalies.

1635. BENNINGTON, J. L. and others. **Management and cost control techniques for the clinical laboratory.** Baltimore & London, University Park Press, 1977, xiii, 363pp. $19.50

Over the last decade the quality and economics of the delivery of health care in the United States have dramatically changed. Financial management has overcome a prime consideration for all professionals in the field of medicine. Aspects covered in the field of laboratory management are: management of people; planning; cost control; and production; and management and marketing techniques. The book is intended as a reference tool for managers who need to review cost control and management techniques as applied to a laboratory environment.

1636. FOWLER, E. F., NICOL, A. G. and REID, I. N. **Evaluation of a teaching hospital necropsy service.** *Journal of Clinical Pathology*, London, 1977, June, vol. 30, no. 6, pp. 575-578.

The information returned to the hospital clinician after a necropsy was investigated in a series of 1,000 patients at the Aberdeen general hospitals. The method of analysis is outlined. It was found that specific clinical queries were answered in 83 per cent of cases, that the necropsy corrected the major clinical diagnosis in 36 per cent of cases, and that 29 per cent of cases were used for undergraduate or postgraduate teaching. The results demonstrate the continuing value of the necropsy as an investigative and educative procedure.

BLOOD TRANSFUSION DEPARTMENT

1637. O'RIORDAN, W. D. **Autotransfusion in the emergency department of a community hospital.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, June, vol. 6, no. 6, pp. 233-237.

The Bentley-100-Autotransfusion System was used in eight cases in the emergency

department of St. Francis Hospital, Lynwood, California, to reinfuse the patients' own blood. The operation of the system is described and one case history discussed in detail. The majority of the patients had massive chest trauma and these received from 1,600 cc to 14,000 cc of autotransfused blood, with a supplement of bank blood. Clotting factors varied considerably during the first post-operative days, but the platelet count returned to normal within two to four days. Blood cultures revealed no growth after 72 hours. The advantages and disadvantages of autotransfusion are discussed and cases mentioned where it is not recommended. The advantages include the easy availability of the blood, and its warmth compared with bank blood.

DIAGNOSTIC X-RAY DEPARTMENT

1638. MADSEN, B. and MEHL, J. **Roentgen-Tele-Data: a radiodiagnostic recording system.** *Radiology*, Easton, 1977, June, vol. 123, no. 3, pp. 627-630.

A radio-diagnostic data-handling system with telephones connected to the Municipal Hospital, University of Aarhus, Denmark, is described. Time, date and location of examination are automatically recorded. The system can deliver spoken instructions from the computer and warns if the data are not valid. Diagnoses, their degree of verification, and cases of special interest are added at display terminals. Codes, equipment and output are described. Costs represent one per cent of the departments' expenditures. Future plans include a booking system, rapid access, and on-line connection to the main data system.

1639. QUICK, G. and PODGORNY, G. **An emergency department radiology audit procedure.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, June, vol. 6, no. 6, pp. 247-250.

An audit procedure was developed in the Department of Emergency Medicine, Forsyth Memorial Hospital, Winston-Salem, North Carolina, with the following aims: (i) to determine the emergency physician's accuracy in interpreting radiographs; (ii) to identify common problems encountered in interpretation; and (iii) to establish objective standards for interpretation. An agreement in readings between the radiologists and the emergency physicians of 97.6 per cent of 8,021 radiographic studies was encouraging, but chest radiographs gave rise to problems. With films in the pneumonia and pneumonitis category, only 10 out of 45 readings agreed, possibly due to the time lag in the appearance of radiographic evidence and other symptoms in the development of pneumonia. A discrepancy of findings in five radiographs involving the chest, skull and face gave rise to some concern, but was accepted as a reasonable margin of error and did not lead to any wrong treatment. However, the repetition of these same cases in a second audit showed a decrease in discrepancies overall, but emphasised the need to discuss these problems further.

REHABILITATION

See also Abstract No. 1667

1640. NICHOLS, P. J. R. **Rehabilitation services and responsibilities.** *Asian Medical Journal*, Tokyo, 1977, March, vol. 20, no. 3, pp. 147-159.

Rehabilitation embraces many physical, social and organizational aspects of the

after-care of patients. Consequently there is confusion between the provision of services and the responsibility for supervising rehabilitation between hospital and community services and the various professional groups concerned with the different aspects of rehabilitation. The types of rehabilitation and principles of rehabilitation of temporary and permanent disabilities are considered. The aims of community and industrial rehabilitation are discussed together with the responsibility of professional staff. The work of the remedial professions is outlined. The need for highly skilled staff, co-operation, close monitoring, and improved training for 'helpers' is essential, so that training can be adapted to changing requirements.

DEPARTMENTS FOR SPECIAL THERAPY

See Abstract Nos. 1609, 1611, 1612, 1653

INTENSIVE CARE UNITS

1641. PAYNE, J. P. and HILL, D. W. **The management of the acutely ill.** Stevenage, Peter Peregrinus, 1977, x, 177pp. £9.00

This volume contains the proceedings of a two-day symposium on the management of the acutely ill, organized by the Research Department of Anaesthetics in the Royal College of Surgeons of England. The emphasis of the symposium was largely directed towards the consequences of trauma and surgery. Aspects covered include: historical and ethical features; selection and transport of patients; specific problems; and organization and planning of an intensive therapy unit.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 1647

1642. SKINNER, T. J. and others. **Factors affecting the choice of hospital-based ambulatory care by the urban poor.** *American Journal of Public Health*, Washington, 1977, May, vol. 67, no. 5, pp. 439-445.

A study of patients in the out-patient department of Ben Taub General Hospital, Harris County, Texas, revealed that almost all could have reached a neighbourhood centre in less time and only a small number came to the hospital out of medical necessity. When the patients were asked about their willingness to obtain treatment at a neighbourhood centre 48 per cent were willing, 52 per cent were not. These reactions varied according to the patients' priorities for medical care. Of those willing to change sites 80 per cent stressed continuence of access compared with 17 per cent of those not willing to change. There was a greater emphasis on quality of care and familiarity with the site amongst those who were unwilling to change. The findings suggest that successful efforts to persuade patients to use a neighbourhood centre must be based upon patient's individual priorities.

CASUALTY AND ACCIDENT

See also Abstract Nos. 1637, 1639, 1674

1643. GIBSON, G. **How far have we come with categorization ?** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 97-98, 100-102.

It is six years since the American Medical Association's Commission on Emergency Medical Services recommended the categorization of the varying capacities of hospitals to deliver emergency care. During that time categorization has been incorporated in state licensing codes and become mandatory for recipients of federal grants. An important body of experience has been accumulated for assessing whether the strategy is an effective one in reducing inappropriate use of emergency departments. It is important to review this experience and re-examine the strategy. Although it has been generally accepted, the author contends that categorization suffers from such severe planning, conceptual and methodological deficiencies, both inherently and in the way it has been applied, that it can no longer be regarded as a reasonable means of either assessing present emergency services or changing them for the better. What are most needed in assessing and changing emergency services are measures of appropriateness of resource use rather than measures of mere resource availability. It is particularly regrettable that such measures do not currently exist and that little research effort is being devoted to them.

1644. SADLER, A. M., SADLER, B. L. and WEBB, S. B. **Emergency medical care: the neglected public service: the Connecticut experience.** Cambridge, Mass., Ballinger, 1977, xxvi, 332pp. £11.00

A study is presented of emergency medical care in Connecticut to determine the improvements required. Aspects covered include: perspective and planning; the problems of emergency medical services over the past decade; the methodology of the study; emergency ambulance services and costs; hospital emergency departments and staff; statement of fundings and priorities; and areas for continued research. As a result of the recommendations emergency medical services are not being given priority in Connecticut. References to each chapter are included.

1645. MATTHEWS, W. C. **Doctor's Other Office, an alternative to the emergency room.** *Journal of Family Practice*, New York, 1977, May, vol. 4, no. 5, pp. 943-945.

Doctors' Other Office (DOO) is a group of ten family physicians who offer after-hours and weekend health case to those non-critical patients in Sacramento, Calif., who would otherwise have to go to a hospital emergency department, even though their medical problems do not require the expensive, elaborate facilities of the emergency department. The organization of the DOO is outlined. The advantages to the patient include less expense and continuous care. The income of the DOO just covers all office expenses; however life insurance and other fringe benefits that are received through the corporation make the organization more financially attractive.

1646. ANDERSON, G. V. and others. **A unique approach to evaluation of emergency care.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, June, vol. 6, no. 6, pp. 254-258.

The Department of Emergency Medicine at the University of Southern California

School of Medicine, Los Angeles, set out to provide a research model to measure the extent and quality of the emergency medical services. A research team was selected from members of the staff. Illness and injury categories were listed and physicians dealing variously with 56 of these categories were sent questionnaires to obtain a basic list of medical procedures for each category. From these, 24 were studied in greater detail by an independent research review committee and then 12 in even more detail, chosen for their frequent occurrence in the emergency department. A scoring system was adopted. A sample of 442 cases provided 'live' data for the research and the patients were observed directly and then followed up at home in order to assess the results of their treatment. Thus, actual cases were evaluated within the 12 chosen categories, and the suitability of the care process, as to tests given and records kept, measured against that recommended by the review committee. The relationship between emergency patient care and its results must be measured by a very exact method of research.

1647. ANWAR, R. A. H., ROBERTS, J. R. and WAGNER, D. K. **The continuing emergency care clinic: improving patient compliance with follow-up care.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, June, vol. 6, no. 6, pp. 251-253.

Patients from emergency care departments are traditionally lax in keeping their subsequent out-patient appointments. A study of such patients at the Medical College of Pennsylvania showed that only 17.8 per cent kept their appointments. A specialized follow-up department, known as the Continuing Emergency Care (CEC) Clinic was opened in 1975 to deal with this problem. The patient sees the same doctor as he saw in the emergency department and need not be involved in the larger out-patient clinic. Data were collected on each case referred to the CEC clinic during a 12-week study period; of a total of 798 patients referred, 65.5 per cent returned for follow-up care, a three-fold improvement which has been maintained.

DAY HOSPITALS

See Abstract No. 1675

CHEST

See Abstract No. 1579

INFECTIOUS DISEASES AND ISOLATION

See Abstract No. 1566

CHILDREN

See also Abstract No. 1624

1648. OPPE, T. E. **The medical care of children in the United Kingdom.** *Asian Medical Journal*, Tokyo, 1977, March, vol. 20, no. 3, pp. 137-146.

A broad picture of the child health services in the United Kingdom as they have developed within the National Health Service (NHS) is presented. The structure of the

NHS is described with its original organisation with the divisions between community health care and the hospital service, and between preventive and curative medicine. The reorganisation of the NHS offers the prospect of improvements and intregration of health services for children. The problems of health surveillance of all children are outlined and the benefits of routine developmental and screening examinations of the population are critically reviewed. It is concluded that the NHS provides a satisfactory system of health care for children which is of comparable quality to other systems, but there are problems in the delivery of child health care which require solution before the medical needs of all children can be said to be fully met.

1649. GRADOS, O., FLORES, W. and DOMINGUEZ, N. Salmonelosis infantil hospitalaria. **[Salmonella in hospitalized children.]** *Boletin de la Oficina Sanitaria Panamericana*, Washington, 1977, March, vol. 82, no. 3, pp. 216-222.

Data were collected concerning infection with Salmonella in patients in the Children's Hospital in Lima for the years 1972-1975. Although this hospital admitted children up to the age of 12 years, most of the positive isolations of Salmonella were in children aged two years or less. A total of 1,224 cultures was confirmed biochemically during the four-year period. The commonest types were *Salmonella enteritidis*, serotype Newport, serogroup C2, and serotype Oranienburg, serotype C1, these two representing 60 per cent and 25 per cent respectively of the total for 1972, 85 and 11 per cent for 1973, 48 and 42 per cent in 1974, and 66 and 14 per cent in 1975. The main serogroups identified were C2 (745), C1 (310), and B (120). The results are presented in two figures and a graph.

1650. PILL, R. **The long-stay child patient: the problems.** *Nursing Times*, London, 1977, July 7, vol. 73, no. 27, occasional papers, pp. 89-92.

Official surveys suggest that there are about 1,600 long-stay (that is, over four months) child patients in England and Wales at any one time, forming only a very small percentage of the total child in-patient population. Differing views about treatment may affect the length of stay, especially among orthopaedic cases who form a high percentage of long-stay patients. Children from backgrounds of poor housing or broken homes tend to stay in hospital longer, as a doctor may be reluctant to discharge a child to a poor home, whereas he would do so to a good home and competent parents. However, this view can be challenged both in terms of the hospital's resources and the child's welfare. An appropriate substitute for home care may sometimes be the solution. The severely handicapped child whose prognosis is poor is most at risk of becoming a long-stay patient. Many hospital wards are not suited to these children because not enough attention is given to their social and emotional needs. On the other hand, grouping severely handicapped children together can lead to difficulties for the staff and a depressing atmosphere for the children. Official recommendations on the care of children in hospital have not been widely implemented and the greatest hope for the long-stay child is the emphasis now placed on support and help for the parents and their increased involvement in decisions about care.

1651. MARTINSON, I. M., editor. **Home care for the dying child: professional and family perspectives.** New York, Appleton-Century-Crofts, 1976, xiii, 332pp. £7.80

There is an increasing awareness that the child with a terminal illness, his parents and

family, and the health professionals who work with the child feel a need for adequate information and physical and emotional support. This book is a study of the home as an alternative health care facility and of the parents providing care for the dying child. The five sections consider: (i) the Home Care for the Dying Child Project, and three parents who have lost a child; (ii) the reactions and experiences of nurses who have been involved with home care for the dying child; (iii) the effects on the family before, during and after death; (iv) the medical, nursing and technical aspects of care for the child with cancer; and (v) theoretical concepts for consideration by professional staff.

1652. COHN, S. S. **Audit enhances patients' environment.** *Hospitals*, Chicago, 1977, May 1, vol. 51, no. 9, pp. 61-62.

The Children's Hospital of Los Angeles is using an environmental audit system to monitor, measure and control the quality of its patients' environment. In the audit package, criteria pertaining to each of five types of area are divided into five categories. The areas are: nurses' stations; treatment rooms; general areas; intensive care areas; and patient rooms. The five categories of criteria are: general and supervisory; patient charts; central service; housekeeping; and engineering. On the audit package, a 'yes' response to a question denotes a satisfactory condition and a 'no' response denotes a problem or an unsatisfactory condition. Use of the system is outlined and a typical page from the audit package is reproduced. The system effectively pinpoints repetitive problems and critical conditions requiring immediate attention; it is useful in developing information on trends, and its preventive implications should not be underestimated. It allows goals to be set and progress towards their achievement to be measured. Most important, the system can help to effect changes that will improve patient care.

1653. MORAN, P., STEWART, L. and VALMAN, B. **Methods for giving oxygen to infants and children.** *Nursing Mirror*, Sutton, 1977, July 7, vol. 145, no. 1, pp. 10-12.

Several new types of instruments have become available for giving oxygen to infants and children and those described are all used at Northwick Park Hospital, Harrow. The oxygen head box (Gairdner Box) ensures constant oxygen concentrations in an incubator and by using a Venturi attachment, warm air from the incubator is mixed with the oxygen before it enters the head box. The Derbyshire chair is an effective way of giving oxygen to a young baby, who can be attended to without the hood being lifted. The Vickers Model 58 Oxymist Tent, for use on a cot or bed, gives oxygen concentrations of 60 per cent using a jet assembly and can be easily stored and quickly prepared for use. The Winliz Floating Island is used primarily to increase humidity and provides a small particle mist, but needs skill and experience in adjustment. All the apparatus is illustrated and a list of manufacturers and prices is given.

GERIATRICS AND LONG-STAY

1654. SIMON, W. Quelques considérations sur les services de soins gériatriques—Services 'R'. [**A few reflexions on geriatric health care—'R' services.**] *Hospitalia* Bruxelles, 1977, vol. 21, no. 2, pp. 90-91.

Within the Belgian hospital system, the 'R' service is the geriatric unit within the acute hospital; its objectives are to provide old people with the best possible care in an

environment where highly technical equipment and treatment are readily available, so that functional rehabilitation may be as rapid as possible. An 'R' service exists in only 29 out of a total of 311 general hospitals in Belgium and some beds in these units are occupied by younger patients. The author suggests that the relative failure of the R unit is due to financial constraints, lack of interest on the part of geriatric specialists, lack of interest within the medical faculties in the training of geriatric specialists, the unwillingness of doctors to pass on patients to their colleagues in these units, and, perhaps, inadequate training of the nurses in these units. The remedy may lie in moving some patients to a chronic sick or psycho-geriatric unit and in increased use of day hospitals.

1655. ORR, J. G. **Care of the elderly patient in hospital.** *Nursing Times*, London, 1977, July 7, vol. 73, no. 27, pp. 1028-1032.

The author points a gloomy picture of geriatric care, where basic human dignity is not respected and wards are grossly under-staffed. The food is often very monotonous, and patients are left to lie in bed or are seated so that they cannot communicate. Company is important, yet visiting hours in geriatric wards tend to be restricted. Often patients do not have their own clothes and are allowed few personal possessions. Nurses rarely talk to patients or give them enough encouragement to pursue active and passive interests. The changes necessary to improve the standards of geriatric care include: (i) the provision of modern buildings and equipment; (ii) the use of the best nurses with a positive outlook towards the patients; (iii) unrestricted visiting; (iv) staff to provide recreation and outings; and (v) the encouragement of independence and the granting of some freedom of choice.

1656. RAMSAY, A. C. and BALLINGER, B. R. **Drug distribution and identifying psychogeriatric patients.** *Nursing Mirror*, Sutton, 1977, July 7, vol. 145, no. 1, p. 21.

Many patients in psychogeriatric wards are unable to identify themselves, a fact which can cause difficulties for drug distribution and other procedures. At the Royal Dundee Lift Hospital, all 164 patients in six psychogeriatric wards were asked their name and other standard questions. Out of 114 females, 80 were able to give their correct surname, and 42 out of 50 males did so. The other 42 were either unable or unwilling to give their name, or gave the wrong one. Of these, 34 were receiving regular drug treatment. During a 12 week period, 53 drug rounds were observed, eight of which were carried out by a nurse unfamiliar with the ward, and 21 errors of drug administration were noted, six being made by staff unfamiliar with the patients and 15 by regular staff. Name tags seem the obvious answer to identification problems, but these are often removed. Stability in nurse staffing is most important among mentally handicapped patients.

CANCER

1657. Hôpital Universitaire—Institut Jules Bordet. **[Institute Jules Bordet—University Hospital.]** *Hôpital Belge*, Bruxelles, 1977, May/June, vol. 20, no. 127, p. 5.

A brief description is given of the Institut Jules Bordet, the Belgian centre for the treatment of cancer and research in this field, and now the centre of the European

Organisation for Cancer Research and Treatment. The centre has a staff of 420, and there are departments of surgery, medicine, radio-therapy, radio-diagnosis, anaesthesiology, and pathological anatomy. Every year approximately 1,500 new patients are treated, and 20,000 people are examined in the screening unit. The dep-art ment of surgery has a continuous wave laser knife; the radiotherapy department uses artificial radio-active elements such as cesium, and has a 35,000,000 volt Betatron and a linear accelerator.

CARDIOLOGY

See Abstract No. 1622

ORTHOPAEDICS

1658. LATCHMAN, B. S. **Alternative modes of care reduce costs: a study of 125 orthopedic cases in acute care beds.** *Dimensions in Health Service*, Toronto, 1977, June, vol. 54, no. 6, pp. 27, 29-31.

A study was made of 125 orthopaedic patients (about 12 per cent of all orthopaedic admissions to an acute general hospital during one year) to estimate: (i) the number and types of orthopaedic patients whose length of stay could be reduced by the use of alternative modes of care; (ii) the potential reduction of length of stay; and (iii) the overall effect on bed use and the economic implications. Altogether, about 36 per cent of the patients were suitable for care in alternative facilities for part of their hospital stay. In addition to the 63 patient days lost due to delays in operation, 334 or approxi-mately 25 per cent of all orthopaedic in-patient days were either potentially avoidable or could have been absorbed through the use of appropriate modes of care. Most of the potential savings in in-patient days were not realized because the alternative facilities were not available. Delays in operation could have been avoided by better scheduling. About 4.8 per cent of in-patient days could be potentially saved by pre-admission testing.

UROLOGY

See Abstract Nos. 1609, 1611, 1612

SURGERY

See also Abstract Nos. 1631, 1632

1659. CLIFF, K. **Numbering the days of the elective surgical patients.** *Health and Social Service Journal*, London, 1977, July 1, vol. 87, no. 4547, pp. 984-985.

Despite studies demonstrating the safety and value of short-stay and day care for certain elective surgical procedures, the average length of stay for patients undergoing herniorrhaphy in England and Wales in 1973 was 8.1 days. Data of patients discharged from Hampshire Area Health Authority in 1974 after the single operative procedure of elective herniorrhaphy are analysed. The analysis, presented in three tables, shows that if a five-day (Monday to Friday) care operational policy was adopted for elective herniorrhaphy there would be a potential saving of bed days and costs. If the length of stay could be reduced to two days there would of course be a greater saving.

1660. DUDLEY, H. A. F. **Loosening patient immobility.** *Lancet*, London, 1977, June 11, vol. i, pp. 1251-1253.

The aim of the Resource Allocation Working Party (RAWP) recommendations is to distribute resources more uniformly. But any redistribution of resources is unlikely to have much effect inside a decade. It is argued further that the economic theory on which RAWP is based will make but scant contribution to the well-being of the individual patient. The axiom on which much of RAWP is based is that resources should be available for the management of the load of all common conditions at district level. If they are not available or insufficient, then they must be supplemented or alternatively, as is now commonly the case, it is just too bad for the patient. The alternative of taking the patient to where the resources are is not considered because doctors assume that they possess patients and there is a feeling that patients must undergo surgery as near their homes as possible. Teaching hospitals in London, and perhaps elsewhere, have a modicum of excess capacity for surgery. In one hospital about one-tenth of their total admissions and a third of their routine surgical patients already come from outside the region. It is believed that a real contribution to the reduction of the national waiting list could be made if patients were taken to where excess capacity may exist.

1661. SIMPSON, J. E. P. and others. **'Right' stay in hospital after surgery: randomised controlled trial.** *British Medical Journal*, London, 1977, June 11, vol. i, pp. 1514-1516.

A randomized, controlled trial was carried out on 100 patients to compare the effects of discharge after certain pre-specified clinical criteria had been fulfulled ('right' stay) with those of discharge at an arbitrary 10 days after surgery ('fixed' stay). The operations concerned (cholecystectomy and vagotomy) were more hazardous than those previously included in studies of early discharge. Patients in the right stay group were discharged, on average, 7.6 days after operation, that is, two days earlier than those in the fixed stay group. In terms of clinical progress, social factors such as return to work, and the acceptability to patients and relatives of the implications of right stay, patients in this group fared as well as those in the fixed stay group, and in some respects slightly better. Right stay entailed the transfer of some work from hospital to community medical and nursing staff, but this also was acceptable. The concept and use of the right stay principle is of value in planning the post-operative discharge of suitable patients.

MATERNITY

1662. BARRON, S. L., THOMSON, A. M. and PHILIPS, P. R. **Home and hospital confinement in Newcastle upon Tyne, 1960 to 1969.** *British Journal of Obstetrics and Gynaecology*, London, 1977, June, vol. 84, no. 6, pp. 401-411.

During the decade 1960 to 1969, perinatal mortality rates in Newcastle upon Tyne were parallel with national trends, in association with a marked reduction of domiciliary midwifery. Analysis of the records of women booked for confinement at home or in specialist hospitals showed that the reduction of mortality was uniform in both high and low risk patients and in all causes of mortality except congenital malformations. An analysis of the data suggests that the main causes of falling perinatal mortality were

improved all-round vigilance, accompanied by many technical advances possible only in specialist hospitals, rather than to any specific feature of obstetric management.

1663. Cox, L. W. and Mcintosh, J. E. A. **The work load and distribution of obstetricians and gynaecologists.** *Medical Journal of Australia*, Glebe, 1977, April 23, vol. i, no. 17, pp. 633-635.

A questionnaire on various details of practice was sent to members of the Royal College of Obstetricians and Gynaecologists in Australia; they were also invited to submit their opinions about training and practice. Replies were received from 345 members, over half the membership. The results are presented in seven tables and discussed. It appears that very heavy work loads are carried; 44 per cent of those in private practice consider themselves overworked. The opinion of 18 per cent is that too few specialists are being trained, and 61 per cent said too few general practitioner obstetricians are being trained. Eighty per cent believe that specialists and trained general practitioners should practise obstetrics. Recertification is thought desirable by 79 per cent, and continuing education by every respondent.

1664. Walker, C. H. M. **Neonatal records and the computer.** *Archives of Disease in Childhood*, London, 1977, June, vol. 52, no. 6, pp. 452-461.

A small group of Scottish paediatricians developed the Scottish Medical Record (Newborn) from 1970 to 1976 in order to: (i) provide the newborn baby with a clinical case sheet and computer record separate from the mother; and (ii) achieve standardized neonatal data on babies born in Scottish hospitals. The perinatal supplement to the Cardiff Diagnostic Classification of children's diseases is used to provide a standard nomenclature. Records are sent in monthly batches from 21 obstetric units, covering 60 to 70 per cent of Scottish births, to the Tayside Computer Centre. Up-to-date annual statistics are produced giving data on: (i) hospital deaths; (ii) resuscitation; (iii) incidence of jaundice; (iv) breast-feeding; and (v) rates of discharge to community care. Accuracy is increased and secretarial time saved by using a form (SMR II) for both the clinical and the computer record, which can be started in the ante-natal clinic and completed in the hospital ward. The perinatal data provided have already pointed to the need for some changes in patient care and the author points out the possibility of co-ordinating the Scottish system with similar systems elsewhere in the United Kingdom.

1665. Chang, C. T. and others. **Bacterial colonization of infants raised in incubators and under radiant heaters.** *Archives of Disease in Childhood*, London, 1977, June, vol. 52, no. 6, pp. 507-509.

At the Institute of Gastroenterology, Havana, Cuba, 34 infants raised in incubators and 24 under radiant heaters were compared for the incidence of bacterial colonization and clinical infection. Cultures were taken during the first three days of life from the anterior nares, umbilicus and groin. None of the 58 infants developed evidence of infection, and bacterial colonization of *Staphylococcus epidermidis* was seen in both groups equally. But with *Staphylococcus aureus*, colonization rates ranged up to 47 per cent amongst the group in incubators whilst only one of the radiant heater infants was colonized. Thus colonization was lower amongst the radiant heater group, despite the fact that the air round the heaters was neither recirculated nor filtered.

GYNAECOLOGY

See Abstract No. 1580

PSYCHIATRY

See also Abstract Nos. 1529, 1537, 1656

1666. FOWLER, D. R. **Current practice in psychiatric utilization review.** *International Journal of Mental Health*, White Plains, 1976/77, vol. 5, no. 4, pp. 49-57.

The recent development of utilization review in the United States is outlined. In 1965 it was incorporated into the Medicare scheme and consisted of a retrospective review of the services provided to Medicare patients at 21- or 30-day intervals of hospitalization in order to assure appropriate use of hospital resources in terms of quality of care and cost containment. The establishment of the system of professional standards review organizations (PSRO) in 1972 following on the Medicare utilization review system is outlined. The problems of implementing such a system within the psychiatric hospital are considered. It is possible that this new utilization review plan will have a far greater effect on the quality and effectiveness of treatment services than on cost containment.

1667. MURRAY, J. **Better prospects: rehabilitation in mental illness hospitals; a report on facilities in 84 hospitals.** London, National Association for Mental Health, 1977, 57pp. £1.50

This survey of 84 psychiatric hospitals in England and Wales focuses upon the facilities available for long-stay patients in social and work rehabilitation, and residential and after-care. Aspects covered include: the need; Government policy; the importance of work; and Government resettlement schemes. The Mind rehabilitation survey is discussed and the findings analyzed. The overall picture is disheartening both for patients and hospital staff working in rehabilitation. With a few notable exceptions, the prospects of resettlement in the community for long-stay patients are poor.

1668. KÖHLER and KÄSSENS. Das Psychiatrische Krankenhaus Hadamar. **[The psychiatric hospital at Hadamar.]** *Krankenhaus*, Stuttgart, 1977, June, vol. 69, no. 6, pp. 223-228.

New buildings for the Hadamar Psychiatric Hospital, Hessen, completed in 1974, provide 316 beds to raise the total, including the old block, to 470. There are three ward blocks, two for drug addicts and one for psychiatry. Each ward floor of the drug addicts' blocks has three nursing groups, each with three single and three three-bedded rooms. The psychiatric block has 64 beds on two ward floors: each ward has two nursing groups with three single rooms, one six-bedded room and an isolation room. There are separate buildings for therapy, the social centre, gymnasium, administration including a 21-bedded admission ward and a 12-bedded sick bay, and stores, etc. The paper is illustrated with a site plan, floor plans and five photographs.

1669. CORMACK, D. **Psychiatric nursing observed: a descriptive study of the work of the charge nurse in acute admission wards of psychiatric hospitals.** London, Royal College of Nursing, 1976, 117pp. £1.80

The objectives of the study are: to review the role of the psychiatric nurse as outlined in the literature; to observe and describe the work of a number of charge nurses in

acute admission wards of four Scottish psychiatric hospitals, with special reference to the function of nurse/patient interaction; and to describe the psychiatric nurse's role as seen by the patient. The approaches used, depending upon the objectives, nature of information required and type of analysis to which the data were to be subjected, are outlined. A bibliography is included.

1670. PHILLIPS, M. **Safety and physical restraint.** *Dimensions in Health Service*, Toronto, 1977, June, vol. 54, no. 6, pp. 12, 14-15.

Changes in philosophy and treatment approaches have resulted in a reduction in the use of mechanical restraints in psychiatric hospitals during the last two or three decades. Attitudes towards mechanical restraints are discussed. It is recognized that some form of mechanical restraints may always be practical and useful. Adequate and up-to-date policies and some system of peer review and accountability are necessary to prevent excessive use. At the Clarke Institute of Psychiatry, Toronto, two types of restraint are used, always as a last resort: wrist and ankle restraints; and a safety jacket with zips. The guidelines for their use, emanating from the medical advisory committee and nursing department, are outlined. In addition to information on violent behaviour in the medical recors and nursing notes, a record of the use of restraints is kept in the nursing office.

1671. KARASU, T. B. and others. **The therapeutic community in theory and practice.** *Hospital and Community Psychiatry*, Washington, 1977, June, vol. 28, no. 6, pp. 436-440.

To obtain an operational description of the therapeutic community the authors reviewed recent literature and drew up a 40-item questionnaire describing different aspects. The questionnaire was sent to authors of recently published articles or books on the subject to assess how characteristic each item was of a therapeutic community. The questionnaire was then completed by members of staff on four psychiatric wards of a university-affiliated municipal hospital who assessed the questionnaire in terms of real and ideal conditions on the ward. Comparisons of the real and ideal ratings are discussed.

1672. BAILINE, S. H., KATCH, M. and GOLDEN, H. K. **Mini-groups: maximizing the therapeutic milieu on an acute psychiatric unit.** *Hospital and Community Psychiatry*, Washington, 1977, June, vol. 28, no. 6, pp. 445-447.

The restrictions on expenditure in the field of mental health together with rapidly rising medical and institutional costs combined with a greater emphasis upon community-based treatment in the United States has greatly reduced the average length of stay of psychiatric patients. Consequently the Hillside Division of the Long Island Jewish-Hillside Medical Center has developed a system of care based on small groups (mini-groups) for patients who are too regressed or disturbed to benefit from individual psychotherapy and who find larger groups overwhelming and confusing. Mini-groups were formed in 1974 on a 20 bed acute in-patient service where traditional treatment approaches have been altered because of a more disturbed patient population and a shorter length of stay. There is a high staff-to-patient ratio, which lends stability to the groups.

1673. AULD, B. J. **The mental health visitor and psychiatric after-care.** *Medical Journal of Australia*, Glebe, 1977, April 23, vol. i, no. 17, pp. 622-623, 626-627.

In 1964 the mental health services of South Australia introduced a new type of mental health worker, the mental health visitor. Mature people (35 to 45 years of age) were given short, specific in-service training to enable them to supplement the social work staff. After training, the mental health visitors were distributed through the mental health services and referrals were made by medical staff to the senior social worker for allocation to a mental health visitor. By 1969 three training courses had been conducted and there were 22 mental health visitors in the field. This paper reports an appraisal of the scheme carried out by means of a monthly special statistics sheet which covered the period March 1969 to February 1970. The quantitative findings of the appraisal do not allow quantitative assessment of the mental health visitors' work, but the increasing use of and demand for their services by the professionals who refer patients implies a value judgment that the quality of their work meets a required standard.

1674. GRAD, G. J. and LINDENMAYER, J.-P. **The psychiatric emergency room: a study of patient treatment requests.** *International Journal of Social Psychiatry*, London, 1977, vol. 23, no. 2, pp. 132-139.

The requests for treatment of 334 patients seen in the psychiatric casualty department of King's County Hospital, Brooklyn, N.Y., were analysed by means of a psychiatric interview, questionnaire, rating scale and previous records. The patients were predominantly from the lowest socio-economic strata, and many came voluntarily. The patients in the survey were mainly male, non-white, single, with an average age of 35, and slightly more than 40 per cent were schizophrenic. Correlations of requests for treatment were found with the patient's previous medical history, diagnoses, degree of illness and source of economic support. The largest contributor to the present request for treatment was past treatment history, especially for those who had been in a State Hospital. Several explanations for the findings are put forward including the fact that learning from past treatment experiences determines in large part the patient's present request, and this request might not necessarily be to his benefit.

1675. MESMER, R. E. G. and MISHLER, M. **A community home program for patients attending a day treatment center.** *Hospital and Community Psychiatry*, Washington, 1977, June, vol. 28, no. 6, pp. 426-427.

The Oaklawn Psychiatric Centre, Elkhart, Ind., has operated a community home scheme since 1962. The scheme provides housing with community families for patients of Oaklawn's day treatment centre who live too far away from Elkhart to commute and also for those who would benefit from a separation from their families. The organization of the scheme is outlined. Approximately 40 per cent of the patients are referred from Elkhart General Hospital's psychiatric in-patient service, others come from the out-patient department or from outside the county. Patients maintain contact with their own family whilst living in the community homes. By separating the community scheme from the longer-term residential scheme Oaklawn Psychiatric Center provides for the needs of both groups of patients; low-cost housing in a natural setting is a suitable complement to the intensive treatment offered in the day treatment centre.

1676. ALLODI, F. and KEDWARD, H. B. **The evolution of the mental hospital in Canada.** *Canadian Journal of Public Health*, Ottawa, 1977, May/June, vol. 68, no. 3, pp. 219-224.

The development of the psychiatric hospital in the United States and Canada through the 19th and 20th centuries is described. The management of the psychiatric patient in need of hospital care has followed, in part, a cyclical pattern. Much of what is called progress could, in fact, be a retrograde step in the history of the psychiatric hospital. The rise and fall of the moral treatment programmes towards the middle of the last century and the 100-year period of biological and medical thinking that followed are discussed. The community psychiatry movement of the 1960s and its effect on the reduction of the in-patient population of the psychiatric hospital, with specific data supplied for the province of Ontario and the provincial psychiatric hospital in Toronto, are also discussed. Finally, the current trend to reduce drastically the number of mental hospital beds, 'the revolving door' phenomenon in admission and re-admission to the psychiatric hospital, and the fate of the chronic psychiatric patient in view of the lack of adequate community-based supporting services, are interpreted as an ominous return to the past when patients did not have either asylums or care in the community.

1677. BIRCHALL, G. and others. **A patients' bank in a hospital for the mentally handicapped.** *Hospital and Health Services Review*, London, 1977, Aug., vol. 73, no. 8, pp. 270-274.

This paper reports the implementation of a patients' bank at Darenth Park Hospital, Dartford, which is a large hospital for the mentally handicapped. A team examined the problems, particularly whether a different approach was necessary to that used for psychiatric patients at Netherne Hospital [See *Hospital Abstracts*, Vol. 13, Abstract No. 604]. It was decided that rather than just a static bank what was required was a permanently sited bank plus a mobile bank that could offer all the services of the main office. It was also decided to devise a credit card system for use in the league of friends shop and a trolley shop going round the wards. The code of procedure for assessment, recording and payment of patients' monies and the introduction of the patients' bank is reproduced. It covers assessment, income, withdrawals, deposits, special payments or purchases, goods to be supplied in lieu of/in addition to cash, ward parties and collective use of patients' money for patients' day trips, coach hire, outings, holidays and television hire. The forms and credit card used are reproduced. The bank provides a much more flexible system, less open to abuse and misunderstanding and helping to give protection to staff. It is more responsive to the individual needs of the patient and has relieved nursing staff of most if not all of the duties of handling patients' money. The cost has been largely that of the work of the people who put the system in, together with the creation of an additional higher clerical officer post, which would have been necessary in any case.

1678. BUDSON, R. D., GROB, M. C. and SINGER, J. E. **A follow-up study of Berkeley House—a psychiatric halfway house.** *International Journal of Social Psychiatry*, London, 1977, vol. 23, no. 2, pp. 120-131.

Berkeley House, Boston, Mass., is a high expectation, transitional psychiatric halfway house which was the first of its kind in the United States affiliated with a

private psychiatric teaching hospital. Twenty-three residents, male and female, live in the house with an expectation that the stay will be no longer than one year. This paper reports a follow-up study of 54 of the 78 patients who lived at Berkeley House since it opened in June 1970 and who left prior to September 1973 (minimally four months before the period of follow-up interviewing). The study covered: living situation (residence); occupational status; family relationships; social adjustment; inter-relationship of several selected variables; use of the house after departure; and reactions to the Berkeley House experience. The results showed that the former residents were functioning quite well across a number of dimensions. Furthermore a majority expressed general satisfaction with the House experience and had made use of the House as a source of support in their later efforts at adjustment in the community.

1679. BURKE, A. W. **Social and psychiatric problems in day hospital management at Hill End.** *International Journal of Social Psychiatry*, London, 1977, vol. 23, no. 2, pp. 103-109.

This paper reports a six-month study of Hill End Day Hospital, St. Albans. At the time the day hospital had a full-time staff of a psychiatrist, nurse in charge, staff nurse, three student nurses, secretary-receptionist and three domestic assistants. The principal findings were: (i) the day hospital provided 30 places on five days per week, but cared for 80 separate seriously ill patients weekly in a population of about 300,000; (ii) the day care cohort was 133, with a 5:2 female/male ratio; (iii) over half the patients were in the 45 to 64 age group and severe functional disorder was diagnosed in 126 patients—almost half of these were psychoneurotic affective disorders; (iv) the data on 54 admissions and 40 discharges showed a high level of interaction and co-operation between the psychiatric hospital, community services and day hospital, and may have contributed to the observed reduction in in-patient admissions, but a low discharge rate of long-stay patients suggested that a chronic population was forming.

1680. COBB, C. W. **Problems and principles in the development of management information systems.** *International Journal of Mental Health*, White Plains, 1976/77, vol. 5, no. 4, pp. 103-120.

The Connecticut Department of Mental Health was a founder member of the Multi-State Information System, but important data are still not part of this system. Major omissions include information on the costs of services and the outcome. It has therefore been in the process of developing its own management information system for several years. This paper identifies some of the problems hindering system use and/or development and advances some principles that may be used in their resolution. The problems discussed are technological (science of mental health service deliver, measurement technology, management science and computer technology), psychological (staff anxieties and value conflicts), rational (structure, information overload and fiscal reality) and political. Two approaches to the problem presented by the lack of a valid theoretical model of service delivery are: (i) simplistic, which requires minimal resources, results in limited information and avoids the problem; and (ii) a more complex approach, which is expensive but can result in extensive, more focused and useful information and that confronts the problem directly. Also discussed are the measurement of programme effectiveness and the conditions which must be met if information system development is to be successful.

1681. MOORES, B. and GRANT, G. W. B. **The 'avoidance' syndrome in hospitals for the mentally handicapped.** *International Journal of Nursing Studies*, Oxford, 1977, vol. 14, no. 2, pp. 91-95.

In order to examine to what extent the level of nurse staffing influenced both the pattern of patient care and staff activities, a study was mounted in two hospitals for the mentally handicapped which were quite dissimilarly endowed with resources. Previous papers revealed significant differences between the hospitals in observed patient activity profiles and in both the number and pattern of interactions received by the patients. This paper reports a further analysis of the data to ascertain whether any pattern emerged as to which patients actually received the interactions. The results are displayed in two graphs. These show quite clearly that disproportionately few patients account for a large proportion of all the interactions at both hospitals. Over the two hospitals taken together the best six recipients received 42 per cent of all interactions, whilst the worst six received only eight per cent. Examination of the interaction patterns in conjunction with the patient activity profiles and the adaptive behaviour scores shows that though patients who appear to exhibit the greatest maladaptive behaviour receive more attention, what they receive is not, perhaps, the type of attention which might be expected to improve their behaviour.

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